Toxicology Research Laboratory

UIC The University of Illinois at Chicago

Department of Pharmacology (M/C 868) 1940 W. Taylor St. Chicago, Illinois 60612-7353

ECURITY (LASS	IFICAT	ION OF	THIS	PAGE

REPORT DOCUMENTATION	ON PAGE		m B A	m Approved 48 No 070 10188
1a. REPORT SECURITY CLASSIFICATION	16. RESTRICTIVE	MARKINGS	19 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 15 11
2a. SECURITY CLASSIFICATION AUTHORITY Unclassified	3. DISTRIBUTION	/AVAILABILITY	OF REPORT	
2b. DECLASSIFICATION / DOWNGRADING SCHEDULE	Unlimited			
4. PERFORMING ORGANIZATION REPORT NUMBER(S)	S. MONITORING	ORGANIZATION F	REPORT NUMBER	K(S)
UIC-5A; (UIC/TRL Study No. 097)				
6a. NAME OF PERFORMING ORGANIZATION Toxicology Research Laboratory University of Illinois at Chicago	7a. NAME OF M	ONITORING ORGA Medical Resear		Activity
6c. ADDRESS (City, State, and ZIP Code) Department of Pharmacology (M/C 868) 1940 W. Taylor Street Chicago, IL 60612-7353	7b. ADDRESS (CA ATIN: SGRD Fort Detri Frederick,	RMARCD ck	Code)	
8a. NAME OF FUNDING/SPONSORING ORGANIZATION U.S. Army Medical (If applicable) Materiel Development Activity SCRD_UMP	9. PROCUREMENT DAMD17-92-C-		ENTIFICATION N	UMBER
8c. ADDRESS (City, State, and ZIP Code)	10. SOURCE OF F	NAME OF TAXABLE PARTY.		
Fort Detrick Frederick, MD 21702-5009	PROGRAM ELEMENT NO. 63807A	PROJECT NO. 30463807	TASK NO. QC	WORK UNIT ACCESSION NO. 073
Draft FROM TO 16. SUPPLEMENTARY NOTATION THIRTEEN WEEK ORAL TOXICITY STUDY OF WR238603		TEEN WEEK R	ECOVERY PER	RIOD IN DOGS
17. COSATI CODES 18. SUBJECT TERMS (if necessary and	l identify by bloc	k number)
This study evaluated the toxicity of WR238605 in dogs following thirteen were included for all groups. Dose levels studied were 0 (vehicle control), 0.1, 2.0 at the lungs and RBCs. Drug treatment was associated with hemolytic anemia which bone marrow M/E ratio, splenomegally, extramedullarly hematopoiesis, and hepatocyte necrosis (high dose males) was supported by altered clinical chemistry vessels was seen in one high dose female, which was no longer evident by the the stress produced by the anemic and/or methemoglobinemic state included deto of thymic lymphocytes. Methemoglobinemia was manifested by clinical signs of included alveolar proteinosis and subacute inflammation. Also, chronic inflamperiod. This was deemed to be part of the process of resolution of alveolar prot of the above described toxic effects were generally seen at the high and mid severity), secondary to hemolytic anemia, and bone marrow hypercellularity (min low dose animals were not supported by alterations in clinical pathology parama (subacute inflammation) and the microscopic changes secondary to the observed no observed effect level (NOEL) in this study was equivocal, but was consider 20. DISTRIBUTION/AVAILABILITY OF ABSTRACT	ks of daily oral (gava and 6.0 mg base/kg/da hich was supported by hemosiderosis in the values. Possibly, seco end of the recovery creases in weight gain f cyanosis (blue gums, amation of the alveola einosis and as such a dose levels. Hemosid dainimal severity) were etters. WR238605 toxi hemolytic anemia (he red to be near the low	reticulocytosis, be liver and spleen. Indary to the hemate period. Generalized; neutrophilic and retongue, and sclera) are and bronchiolar assecondary lesion to erosis and subacut also seen in low deity was essentially epatic hemosiderosis dose level of 0.1	one marrow hyper Mild hepatotoxic ologic alterations, of or secondary tox monocytic leukocy. Lung lesions indepithelium develop a direct treatment in inflammation of the inflammation of the reversible, except is). Based upon the mg base/kg/day.	38605 were seen in cellularity, decrease ity as evidenced by congestion of retinal tic effects related to tosis; and depletion used by WR238605 ped in the recovery t-related effect. All f the liver (minimal ever, these findings t for the lung lesions
UNCLASSIFIED/UNLIMITED SAME AS RPT. DTIC USERS 22a. NAME OF RESPONSIBLE INDIVIDUAL BOTTO S. T. ANDREWS	Urclassified 22b. TELEPHONE (In	clude Area Code)		MBOL
DD Form 1473, JUN 86 Previous editions are of	(312) 996–5		N/A LASSIFICATION (OF THIS PAGE

Contract No.: DAMD17-92-C-2001

Task Order No.: UIC-5A UIC/TRL Study No.: 097



Title Page

Volume 3 of 3

Revised Draft Report for Task Order No. UIC-5A

THIRTEEN WEEK ORAL TOXICITY STUDY OF WR238605 WITH A THIRTEEN WEEK RECOVERY PERIOD IN DOGS

Sponsor: US Army Medical Materiel

Development Activity

Test Article: WR238605

Contract No.: DAMD17-92-C-2001

Study Director

Barry S. Levine, D.Sc., D.A.B.T.

In-Life Phase Completed On

June 11, 1993

Performing Laboratory

TOXICOLOGY RESEARCH LABORATORY (TRL)
University of Illinois at Chicago (UIC)
Department of Pharmacology
1940 W. Taylor St.
Chicago, IL 60612-7353

The views, opinions, and/or findings contained in this report are those of the author(s) and should not be construed as an official Department of the Army position, policy, or decision, unless so designated by other documentation.

Contract No.: DAMD17-92-C-2001

Task Order No.: UIC-5A UIC/TRL Study No.: 097



VOLUME 3

APPENDICES (contd.)

7	Individual Hematology Data 7-
8	Individual Urinalysis Data 8-
9	Cardiology Report
10	Ophthalmology Report
11	Individual Organ Weights
12	Pathology Report
13	Protocol and Protocol Amendments
14	Study Deviations

APPENDIX 7

Individual Hematology Data



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Erythrocytes

STUDY ID: 097

STUDY NO: 097

ABBR: RB	C							UNITS: 10^6/cmm
ANIMAL IC	Week -3	Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26
GROUP: 1	:0 mg base/kg	/day						
7531	6.61	7.33	7.07	6.63	6.06	6.04	7.48	7.41
7532	5.85	5.54	5.81	6.26	6.06	6.13	6.93	6.87
7512	6.25	6.26	6.02	5.91	5.92	6.00	6.35	7.29
7515	6.05	6.30	5.85	6.73	6.40	6.22	6.88	7.43
7521	6.52	6.29	6.38	6.63	6.30	7.09		
7533	5.68	5.43	5.44	5.62	6.50	5.95		H =
7520	6.64	6.95	6.82	6.38	6.21	7.00		H H
7505	5.50	6.40	5.54	6.00	6.07	6.26	••	• •
MEAN	6.14	6.31	6.12	6.27	6.19	6.34	6.91	7.25
SD	0.438	0.636	0.590	0.398	0.198	0.450	0.462	0.261
N	8	8	8	8	8	8	4	4
GROUP: 2M	:0.1 mg base/	kg/day						
		6.35	6.22	6.30	6.59	7.19	6.87	7.52
7519	6.02	6.00	5.86	6.23	5.95	6.54	6.73	7.47
7529	5.80	5.95	5.83	6.23	6.56	6.14	6.49	6.43
7536	6.50	6.15	6.65	5.77	5.58	5.79	6.42	6.49
7503	6.27	6.35	6.26	6.41	6.69	7.84		
7523	6.59	6.48	6.97	6.66	6.54	5.97		
7517	6.75	6.78	6.59	6.43	7.15	6.82		
7528	6.43	6.26	5.58	6.41	6.65	6.80		**
MEAN	6.35	6.29	6.25	6.31	6.46	6.64	6.63	6.98
SD	0.309	0.268	0.474	0.257	0.483	0.679	0.209	0.598
N	8	8	8	8	8	8	4	4



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Erythrocytes

STU0Y ID: 097

SEX: MALE

STUDY NO: 097

ABBR: RBC								UNITS: 10^6/cmm
	Week -3	Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26
	2.0 mg base/							
7538	7.05	6.73	6.23	5.99	6.62	6.44	7.43	7.29
7516	6.41	6.18	6.42	5.33	5.92	6.88	6.63	7.59
7522	6.55	7.28	7.26	6.36	7.44	7.20	8.57	8.22
7510	6.97	6.93	6.64	5.93	6.25	5.72	7.78	7.07
7576	5.87	5.68	5.81	5.04	5.80	5.55		
7506	6.38	5.81	6.00	5.55	6.61	5.86		
7502	7.02	6.32	6.95	6.34	6.23	6.76		
7514	6.19	5.73	6.01	5.23	5.68	5.85		
MEAN	6.56	6.33	6.42	5.72	6.32	6.28	7.60	7.54
SD	0.429	0.597	0.505	0.506	0.571	0.618	0.805	0.499
N	8	8	8	8	8	8	4	4
GROUP: 4M:	6.0 mg base/	kg/day					•••••	
		6.99	6.95	6.11	6.78	6.56	7.00	7.68
7511		6.82	6.42	5.50				7.77
7530	6.29	6.55	6.20	5.38	6.47	5.52	5.77	7.28
7507	5.90	6.55	5.54	4.83	6.47	5.94	6.84	7.12
7508	5.76	5.90	5.94	5.02	5.75	5.11		
7509	6.13	6.66	6.27	5.44	6.19	5.51		
7518	6.34	6.14	5.95	5.26	5.71	6.05		
7524	7.11		6.68	5.94		6.56		
MEAN	6.43	6.53	6.24	5.44	6.35	6.11	6.72	7.46
SD	0.541	0.352	0.447	0.429	0.433	0.795	0.658	0.312
N	8	8	8	8	8	8	4	4



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Hemoglobin

STUDY ID: 097 STUDY NO: 097 SEX: MALE

ANTMAL TO	Uook -3	Week -1	Ueek 2	Veek 4	Ueek 8	Ueek 13	Week 18	Week 26
ANIMAL ID	week -J	week 1						
GROUP: 1M:	0 mg base/kg	/day						
7531	15.9	17.7	17.1	16.0	15.8	14.9	18.3	18.1
7532	14.3	13.4	14.0	15.4	15.7	15.2	17.5	17.5
7512	15.2	15.2	14.7	14.6	14.6	15.0	15.5	17.8
7515	14.6	15.3	13.8	16.3	15.4	15.1	16.6	18.0
7521	16.5	15.7	16.2	17.0	16.3	18.2		
7533	13.7	13.3	13.6	14.1	14.5	15.2		
7520	16.3	17.4	16.9	15.8	16.5	17.6		• •
7505	13.2	15.3	13.2	14.7	15.7	15.3	• •	
MEAN	15.0	15.4	14.9	15.5	15.6	15.8	17.0	17.9
SD	1.22	1.60	1.57	0.97	0.72	1.30	1.20	0.26
N	8	8	8	8	8	8		4
GROUP: 2M:	0.1 mg base/	'kg/day						
7527			14.6	14.7	16.5	17.1	16.4	17.8
7519	14.8	14.7	14.5	15.6	15.3	16.8	17.0	18.8
7529	13.5	14.0	13.9	15.4	16.9	15.2	16.2	15.5
7536	16.2	15.3	16.3	14.2	14.8	14.3	16.0	16.3
7503	15.0	15.2	15.0	15.5	17.1	19.1		
7523	16.6	16.4	17.8	17.0	16.7	15.5		
7517	16.0	16.4	16.1	15.8	17.4	16.6		
7528	15.3	15.2	13.3	15.5	15.8	16.7		
MEAN	15.3	15.3	15.2	15.5	16.3	16.4	16.4	17.1
SD	0.97	0.80	1.46	0.82	0.92	1.45	0.43	1.48
N	8	8	8	8	8	8	4	4

⁽⁻⁻⁾⁻Data Unavailable



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Hemoglobin

STUDY ID: 097

SEX: MALE

STUDY NO: 097

ABBR: THG	В							UNITS: g/d
ANIMAL ID	Week -3	Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26
GROUP: 3M:	2.0 mg base/	'kg/day						
7538	15.9	15.5	14.9	14.4	16.4	15.0	17.4	17.6
7516	16.0	15.4	16.1	13.1	14.4	16.7	16.4	18.7
7522	15.4	17.2	17.4	15.4	17.6	16.8	20.1	19.2
7510	15.7	15.7	14.9	13.9	14.0	13.1	17.6	15.9
7576	14.8	14.3	14.6	13.0	15.7	14.2		
7506	15.7	14.5	15.0	14.0	16.5	14.7		
7502	16.7	15.3	16.6	15.6	16.5	17.0		
7514	14.3	13.2	14.4	12.5	14.8	13.8	••	
MEAN	15.6	15.1	15.5	14.0	15.7	15.2	17.9	17.9
SD	0.74	1.17	1.08	1.12	1.24	1.50	1.57	1.46
N	8	8	8				4	4
GROUP: 4M:	:6.0 mg base/	kg/dav						
7535		17.6	17.9	16.0	18.2	16.2	17.3	19.0
7511		15.7		13.2	16.3		16.1	17.4
7530		15.5	14.5	12.3		99579050000	O 800.51 5	00000 C 000
7507	15.2	16.5	14.0	12.1	16.1	15.2	17.4	
7508	14.9	15.5	15.5	13.1	14.5			
7509	15.0	16.3		13.3	14.5			
7518	15.6	15.0	14.6	12.9				
7524	17.3	16.4	16.9	15.1	16.4	17.0		
MEAN	15.7	16.1		13.5			16.0	17.7
SD	1.03	0.81	1.30	1.36	1.42	1.68	2.01	1.00
N	8	8	8	8	8	8	4	4

4

THIRTEEN WEEK ORAL TOXICITY STUDY OF WR 238605 WITH A THIRTEEN WEEK RECOVERY PERIOD IN DOGS

INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Hematocrit

STUDY NO: 097 ABBR: HCT UNITS: % ANIMAL ID Week -3 Week -1 Week 2 Week 4 Week 8 Week 13 Week 18 Week 26 GROUP: 1M:0 mg base/kg/day

 48.5
 46.3
 42.7
 42.5
 51.7

 40.7
 44.4
 43.1
 44.0
 48.9

 42.1
 41.6
 41.7
 43.0
 44.2

 40.8
 46.3
 44.7
 43.4
 47.5

 46.2
 47.7
 45.5
 51.4
 -

 39.7
 40.6
 42.2
 42.8
 -

 47.9
 44.9
 44.0
 49.1
 -

 39.1
 42.2
 42.3
 43.2
 -
 46.2 50.7 41.8 39.1 7532 44.6 42.7 47.3 7512 44.4 50.7 7515 44.2 51.6 42.7 47.3 41.5 48.0 39.0 7521 45.3 39.4 7533 49.3 7520 45.1 7505 43.1 44.3 43.3 44.9 48.1 3.81 2.54 1.33 3.37 3.12 8 8 8 8 4 43.9 3.16 44.7 MEAN 50.6 SD 4.10 3.12 8 8 N 4 GROUP: 2M:0.1 mg base/kg/day

 41.4
 42.1
 44.0
 48.0

 42.8
 45.0
 42.6
 47.7

 40.5
 43.2
 45.2
 42.7

 46.1
 40.7
 39.4
 40.8

 43.8
 44.7
 46.4
 54.3

 49.9
 47.6
 46.8
 43.5

 46.3
 45.1
 50.0
 47.2

 38.1
 44.0
 45.7
 46.6

 43.5 42.9 45.8 49.5 7527 44.4 43.5 48.3 7519 53.6 44.6 7529 40.0 41.1 43.9 46.0 43.9 43.4 44.4 7536 45.5 43.9 7503 48.8 47.9 44.7 47.5 7523 47.5 7517 43.5 7528 43.6 44.1 45.0 46.4 3.75 2.10 3.14 4.15 45.8 48.1 44.2 MEAN 44.9 SD 1.79 2.74 2.23 4.34

8

8

8

8

N

8

⁽⁻⁻⁾⁻Data Unavailable

INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Hematocrit

STUDY ID: 097

SEX: MALE

STUDY NO: 097 ABBR: HCT

UNITS: %

ANIMAL ID	Week -3	Week -1			ARAMATA CARA	Week 13		
GROUP: 3M	1:2.0 mg base/	kg/day						
7538	46.5	45.1	42.6	42.4	45.7	43.7	50.1	48.8
7516	47.0	45.1	46.0	39.6	42.5	48.8	46.3	51.5
7522	44.7	49.2	48.4	43.9	50.3	47.6	56.3	52.9
7510	46.8	45.7	43.4	40.1	42.7	39.2	51.7	45.6
7576	43.1	41.4	42.4	38.2	43.4	41.1		
7506	46.3	41.4	43.0	40.8	47.8	41.6		
7502	50.1	44.7	48.8	46.7	45.6	49.1		
7514	41.8	38.2	40.0	36.6	39.1	39.3		
MEAN	45.8	43.9	44.3	41.0	44.6	43.8	51.1	49.7
SD	2.57	3.38	3.10	3.23	3.48	4.16	4.14	3.22
N	8	8	8	8	8	8	4	4
							•	
	:6.0 mg base/					100.00	1000	Western 1
7535	202 202	49.9						
7511		45.0	42.2	37.7	(37) (3) (2) (2)	9,0, 5,00		100000000000000000000000000000000000000
7530	42.4	44.1	41.2	37.1	42.4	36.2	38.3	46.2
7507	43.3	47.7	40.6	36.8	47.9	44.6	50.3	49.1
7508	43.4	44.1	44.8	39.1	42.2	38.4		
7509	44.3	47.2	44.1	39.1	42.2	38.5		••
7518	44.8	43.0	41.5	37.9	40.3	41.9	• •	
7524	50.1	46.5	48.4	44.5	46.9	45.5	••	
MEAN	45.5	45.9	44.0	39.7	44.3	42.2	45.6	48.9
SD	2.71	2.30	3.32	3.30	2.99	4.08	5.38	2.46
N	8	8	8	8	8	8	4	4

INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Mean Corpuscular Volume

STUDY ID: 097
SEX: MALE
STUDY NO: 097
ABBR: MCV
UNITS: fL

ANIMAL ID	Week -3	Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26
GROUP:	1M:0 mg bas	se/kg/day						
7531	69.9	69.2	68.6	69.8	70.5	70.4	69.1	69.0
7532	71.5	70.6	70.1	70.9	71.1	71.8	70.6	71.0
7512	71.4	70.9	69.9	70.4	70.4	71.7	69.6	69.5
7515	70.6	70.2	69.7	68.8	69.8	69.8	69.0	69.4
7521	72.5	72.0	72.4	71.9	72.2	72.5		
7533	73.1	72.6	73.0	72.2	68.8	71.9		
7520	72.3	70.9	70.2	70.4	70.9	70.1		
7505	70.9	70.5	70.6	70.3	69.7	69.0		
MEAN	71.5	70.9	70.6	70.6	70.4	70.9	69.6	69.7
SD	1.06	1.05	1.45	1.09	1.03	1.24	0.73	0.88
N	8	8	8	8	8	8	4	4
GROUP:	2M:0.1 mg b	ase/kg/day						
7527	67.8	67.6	66.6	66.8	66.8	66.8	66.7	65.8
7519	73.8	72.5	73.0	72.2	71.6	72.9	71.8	71.8
7529	69.0	69.1	69.5	69.3	68.9	69.5	68.7	68.3
7536	70.8	70.6	69.3	70.5	70.6	70.5	69.2	70.1
7503	70.0	69.1	70.0	69.7	69.4	69.3		
7523	74.1	73.3	71.6	71.5	71.6	72.9		
7517	71.0	70.1	70.3	70.1	69.9	69.2		
7528	69.5	69.5	68.3	68.6	68.7	68.5		
MEAN	70.8	70.2	69.8	69.8	69.7	70.0	69.1	69.0
SD	2.22	1.88	1.95	1.69	1.61	2.10	2.10	2.57
N	8	8	8	8	8	8	4	4



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Mean Corpuscular Volume

STUDY ID: 097
STUDY NO: 097
ABBR: MCV
STUDY NO: 097

,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,								
ANIMAL ID	Week -3	Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26
GROUP	: 3M:2.0 mg l	base/kg/day						
7538	66.0	67.0	68.4	70.5	69.0	67.9	67.4	66.9
7516	73.3	73.0	71.7	74.3	71.8	70.9	69.8	67.9
7522	68.2	67.6	66.7	69.0	67.6	66.1	65.7	64.4
7510	67.1	65.9	65.4	67.6	68.3	68.5	66.5	64.5
7576	73.4	72.9	73.0	75.8	74.8	74.1		
7506	72.6	71.3	71.7	73.5	72.3	71.0		
7502	71.4	70.7	70.2	73.7	73.2	72.6		
7514	67.5	66.7	66.6	70.0	68.8	67.2	• •	
MEAN	69.9	69.4	69.2	71.8	70.7	69.8	67.4	65.9
SD	3.05	2.90	2.83	2.91	2.64	2.80	1.77	1.75
N	8	8	8	8	8	8	4	4
GPOLID	: 4M:6.0 mg t	hase/kg/day			**********			•
7535		71.4	70.9	74.0	70.9	69.4	69.9	67.8
7511	66.1	66.0	65.7	68.5	65.0	61.9	61.8	61.9
7530	67.4	67.2	66.5	69.0	65.5	65.6	66.4	63.5
7507	73.4	72.8	73.3	76.2	74.0	75.1	73.5	69.0
7508	75.3	74.7	75.4	77.9	68.8	75.1		
7509	72.3	70.9	70.3	71.9	68.8	69.9		
7518	70.7	70.0	69.7	72.1	70.6	69.3		***
7524	70.5	70.3	72.5	74.9	70.6	69.4	• •	
MEAN	70.9	70.4	70.5	73.1	69.3	69.5	67.9	65.6
SD	3.00	2.81	3.29	3.32	2.96	4.41	4.99	3.39
N	8	8	8	8	8	8	4	4



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Mean Corpuscular Hemoglobin

STUDY ID: 097

STUDY NO: 097 ABBR: TMCH

UNITS: pg

ABBR: IMC	Н							UNII2:	pg
ANIMAL ID	Week -3	Week -1	Week 2			Week 13		Week 26	
GROUP: 1M	:0 mg base/kg	ı/day							
7531		24.1	24.2	24.1	26.1	24.7	24.5	24.4	
7532		24.2	24.1	24.6	25.9	24.8	25.3	25.5	
7512	24.3	24.3	24.4	24.7	24.7	25.0	24.4	24.4	
7515	24.1	24.3	23.6	24.2	24.1	24.3	24.1	24.2	
7521	25.3	25.0	25.4	25.6	25.9	25.7			
7533	24.1	24.5	25.0	25.1	23.7	25.5			
7520	24.5	25.0	24.8	24.8	26.6	25.1		• •	
7505	24.0	23.9	23.8	24.5	25.9	24.4			
MEAN	24.4	24.4	24.4	24.7	25.4	24.9	24.6	24.6	
SD	0.42	0.40	0.62	0.48	1.05	0.49	0.51	0.59	
N	8	8	8	8	8	8	4	4	
GROUP: 2M	:0.1 mg base/	'kg/day				• • • • • • • • • • • • • • • • • • • •		•••••	
7527			23.5	23.3	25.0	23.8	23.9	23.7	
7519	24.6	24.5	24.7	25.0	25.7	25.7	25.3	25.2	
7529	23.3	23.5	23.8	24.7	25.8	24.8	25.0	24.1	
7536	24.9	24.9	24.5	24.6	26.5	24.7	24.9	25.1	
7503	23.9	23.9	24.0	24.2	25.6	24.4		• •	
7523	25.2	25.3	25.5	25.5	25.5	26.0			
7517	23.7	24.2	24.4	24.6	24.3	24.3			
7528	23.8	24.3	23.8	24.2	23.8	24.6		• •	
MEAN	24.1	24.3	24.3	24.5	25.3	24.8	24.8	24.5	
SD .	0.70	0.59	0.64		0.87	0.73	0.61	0.74	
N	8	8	8	8	8	8	4	4	



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Mean Corpuscular Hemoglobin

STUDY ID: 097

SEX: MALE
STUDY NO: 097

ABBR: TMCH UNITS: pg

ANIMAL ID	Week -3	Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26
GROUP: 3M	:2.0 mg base/	kg/day						
7538	22.6	23.0	23.9	24.0	24.8	23.3	23.4	24.1
7516	25.0	24.9	25.1	24.6	24.3	24.3	24.7	24.6
7522	23.5	23.6	24.0	24.2	23.7	23.3	23.5	23.4
7510	22.5	22.7	22.4	23.4	22.4	22.9	22.6	22.5
7576	25.2	25.2	25.1	25.8	27.1	25.6		
7506	24.6	25.0	25.0	25.2	25.0	25.1		
7502	23.8	24.2	23.9	24.6	26.5	25.1		
7514	23.1	23.0	24.0	23.9	26.1	23.6		
MEAN	23.8	24.0	24.2	24.5	25.0	24.2	23.6	23.7
SD	1.05	1.01	0.91	0.77	1.55	1.02	0.87	0.91
N	8	8	8	8	8	8		4
GROUP: 4M	:6.0 mg base/	kg/dav						
7535	25.1	25.2	25.8	26.2	26.8	24.7	24.7	24.7
7511		23.0	23.8	24.0	23.9	21.9	22.1	22.4
7530	22.9	26.3	23.4	22.9	24.0	23.0	22.7	22.8
7507	25.8	25.2	25.3	25.1	24.9	25.6	25.4	25.0
7508	25.9	26.3	26.1	26.1	23.7	26.2		
7509	24.5	24.5	24.6	24.4	23.7	24.0		
7518	24.6	24.4	24.5	24.5	24.0	23.8		
7524	24.3	24.8	25.3	25.4	24.7	24.7		
MEAN	24.5	25.0	24.9	24.8	24.5	24.2	23.7	23.7
SD .	1.15	1.08	0.95	1.11	1.04	1.38	1.58	1.31
N	8	8	8	8	8	8	4	4

⁽⁻⁻⁾⁻Data Unavailable



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Mean Copuscular Hemo. Conc.

STUDY ID: 097

SEX: MALE
STUDY NO: 097

ARRR: TMCHC

ABBR: TMC	HC							UNITS: g/d	iL
		Week -1						Week 26	
	0 mg base/kg								
7531	34.4	34.9	35.3	34.6	37.0	35.1	35.4	35.4	
7532	34.2	34.3	34.4	34.7	36.4	34.5	35.8	35.9	
	34.1		34.9	35.1	35.0	34.9	35.1	35.1	
7515	34.2	34.6	33.8	35.2	34.5	34.8	34.9	34.9	
7521	34.9	34.7	35.1	35.6	35.8	35.4			
7533	33.0	33.8	34.3	34.7	34.4	35.5			
7520	34.0	35.3	35.3	35.2	37.5				
7505	33.8	33.9	33.8	34.8	37.1	35.4			
MEAN	34.1	34.5	34.6	35.0	36.0	35.2	35.3	35.3	
SD	0.54	0.51	0.62	0.34	1.22	0.43	0.39	0.43	
N	8	8	8	8	8	8	4	4	
GROUP: 2M:	0.1 mg base/	'kg/dav							
		35.2	35.3	34.9	37.5	35.6	35.8	36.0	
7519		33.8					-		
7529	33.7								
7536	35.2	35.3		34.9	37.6	70 70 70 70 70 70	with the same of t	test and the same	
7503	34.2	34.6	34.2	34.7	36.9	35.2			
7523	34.0	34.5	35.7		35.7	700.000 Ja -		**	
7517	33.4		34.8	10010010010					
7528	34.2	34.9	34.9	35.2	34.6	35.8			
MEAN	34.1	34.6	34.8	35.1	36.3	35.4	35.8	35.6	
SD	0.64	0.51				0.28	0.46	0.42	
N	8	8	8	8	8	8	4	4	



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Mean Copuscular Hemo. Conc.

STUDY NO: 097 ABBR: TMCHC UNITS: g/dL ANIMAL ID Week -3 Week -1 Week 2 Week 4 Week 8 Week 13 Week 18 Week 26 GROUP: 3M:2.0 mg base/kg/day 7538 34.2 34.4 35.0 34.1 35.9 34.3 34.7 7516 34.0 34.1 35.0 33.1 33.9 34.2 35.4 7522 34.5 35.0 36.0 35.1 35.0 35.3 35.7 7510 33.5 34.4 34.3 34.7 32.8 33.4 34.0 7576 34.3 34.5 34.4 34.0 36.2 34.5 -- 7506 33.9 35.0 34.9 34.3 34.5 35.3 -- 7502 33.3 34.2 34.0 33.4 36.2 34.6 -- 7514 34.2 34.6 36.0 34.2 37.9 35.1 --36.3 36.3 34.9
 MEAN
 34.0
 34.5
 35.0
 34.1
 35.3
 34.6
 35.0
 35.9

 SD
 0.41
 0.33
 0.74
 0.64
 1.59
 0.65
 0.76
 0.67

 N
 8
 8
 8
 8
 8
 8
 4
 4
 GROUP: 4M:6.0 mg base/kg/day 35.9 36.3
 34.6
 35.0
 35.2
 34.0
 35.3
 34.9
 35.0
 36.2

 0.50
 0.30
 0.70
 0.85
 1.53
 0.60
 0.77
 0.25

 8
 8
 8
 8
 8
 4
 4
 SD . N



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Reticulocytes (%RBCs)

STUDY NO: 097 STUDY NO: 097 ABBR: RETICS SEX: MALE

UNITS: % RBCs

MOOK! KEI	00							OKTIOT A KOO
ANIMAL ID	Week -3	Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26
GROUP: 1M:	0 mg base/kg	/day						
7531	0.2	0.3	0.6	0.5	0.1	0.2	0.4	0.2
7532	0.3	0.3	0.1	0.7	0.8	0.5	0.3	0.2
7512	0.6	0.0	0.1	0.0	0.5	0.5	0.4	0.5
7515	0.3	0.0	0.1	0.2	0.1	0.0	0.7	0.2
7521	0.1	0.0	0.0	0.2	0.1	0.3		**
7533	0.5	0.4	0.2	0.3	0.0	0.1		
7520	0.7	0.1	0.0	0.1	0.0	0.2		
7505	0.4	0.1	0.0	0.3	0.1	0.3		••
MEAN	0.4	0.2	0.1	0.3	0.2	0.3	0.5	0.3
SD	0.20	0.16	0.20	0.22	0.29	0.18	0.17	0.15
N	8	8	8	8	8	8	4	4
	0.4 5							
7527	0.1 mg base/ 0.1	0.0	0.0	0.0	0.1	0.1	0.5	0.2
7519	0.4	0.0	0.2	0.0	0.6	0.8	0.9	
7529	0.4	0.0	0.0	0.0	0.8	0.8	0.9	0.8
7536	0.0	0.0	0.1	0.2	0.4	0.1	0.7	0.3
7503	0.8	0.1	0.4	0.6	0.4	0.9	0.7	0.5
7523	0.2	0.0	0.2	0.8	0.3	0.0		••
7517			0.4	0.1	0.3	0.2		
7517 7528	1.2	0.2	0.0	0.1	2.002			
1320	0.2	0.0	0.0	0.0	0.2	0.5	••	
MEAN	0.4	0.1	0.2	0.1	0.3	0.3	0.6	0.4
SD .	0.40	0.07	0.17	0.21	0.16	0.35	0.34	0.29
N	8	8	8	8	8	8	4	4



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Reticulocytes (%RBCs)

STUDY ID: 097 STUDY NO: 097 ABBR: RETICS SEX: MALE

UNITS: % RRCs

ABBR: RET	ICS							UNITS: % RBCs
ANIMAL ID	Week -3	Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26
GROUP: 3M:	2.0 mg base/	'kg/day						
7538	0.1	0.2	0.8	0.8	0.6	0.6	0.4	0.9
7516	0.3	0.3	0.4	0.6	0.6	1.1	0.7	0.3
7522	0.8	0.0	0.3	0.6	0.7	1.2	0.5	0.3
7510	1.2	0.1	0.4	0.3	1.2	0.9	0.6	0.1
7576	0.5	0.0	0.0	0.7	0.6	0.9		
7506	0.4	0.2	0.3	0.4	0.7	0.3		
7502	0.3	0.0	0.4	0.7	0.5	0.3		
7514	0.5	0.3	0.2	0.8	0.4	0.8		
MEAN	0.5	0.1	0.4	0.6	0.7	0.8	0.6	0.4
SD	0.34	0.13	0.23	0.18	0.24	0.34	0.13	0.35
N	8	8	8	8	8	8	4	4
	:6.0 mg base/							
7535	0.1	0.0	0.2	1.2	0.6	0.9		A-1-
7511	0.1	0.0	0.2	0.5	0.6	1.0	0.5	
7530	0.1	0.0	0.3	1.5	1.6	1.1	0.7	0.8
7507	0.3	0.1	0.3	2.0	1.4	1.2	1.2	0.2
7508	0.4	0.0	0.5	0.8	0.0	1.0		
7509	0.3	0.2	0.5	1.0	0.0	2.1		
7518	0.3	0.1	0.0	0.7	1.9	1.2		• •
7524	0.5	0.1	0.5	1.0	0.9	0.9		
MEAN	0.3	0.1	0.3	1.1	0.9	1.2	0.8	0.4
SD	0.15	0.07	0.18	0.48	0.71	0.39	0.31	0.31
N	8	8	8	8	8	8	4	4

INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Nucleated Red Cells

STUDY NO: 097

ABBR: NRBC								
NIMAL ID	Week -3	Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26
ROUP: 1M:	0 mg base/kg	g/day						
7531	0	0	0	0	0	0	0	0
7532	0	0	0	0	1	1	0	0
512	0	0	1	1	2	0	0	5
7515	1	0	0	0	0	0	4	1
7521	0	0	1	0	0	0		
533	0	0	0	0	0	2		
520	0	0	0	0	0	0		
505	0	0	0	0	0	1		
IEAN	0	0	0	0	0	1	1	2
SD	0.4	0.0	0.5	0.4	0.7	0.8	2.0	2.4
N	8	8	8	8	8	8	4	4
ROUP: 2M:	0.1 mg base/	'kg/dav						
527	0	0	1	3	0	0	0	1
519	0	0	0	0	2	0	3	0
529	0	0	0	0	0	1	0	0
536	0	0	0	1	0	7	0	0
503	1	0	1	3	2	0		
523	0	0	0	0	3	2		
517	0	0	0	0	0	1	• •	
528	0	0	0	0	0	0		
EAN	0	0	0	1	1	1	1	0
SD	0.4	0.0	0.5	1.4	1.2	2.4	1.5	0.5
N	8	8	8	8	8	8	4	4

(--)-Data Unavailable

INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Nucleated Red Cells

STUDY ID: 097
SEX: MALE
STUDY NO: 097

ABBR: NRBC								UNITS: COUNT
ANIMAL ID	Week -3	Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26
GROUP: 3M:	2.0 mg base/	kg/day						
7538	0	0	0	1	1	1	0	11
7516	0	0	0	1	1	0	2	0
7522	0	1	0	0	0	0	0	1
7510	0	0	0	2	0	1	0	2
7576	0	0	1	1	2	0		
7506	1	0	0	2	0	1		
7502	2	0	0	0	0	1		
7514	0	0	0	0	0	0	••	
MEAN	0	0	0	1	1	1	1	4
SD	0.7	0.4	0.4	0.8	0.8	0.5	1.0	5.1
N	8	8	8	8	8	8	4	4
GROUP: 4M:	6.0 mg base/	kg/day				************		
7535	0	0	0	0	0	1	0	0
7511	0	0	0	5	0	0	0	1
7530	0	0	4	3	0	0	0	1
7507	0	0	3	8	2	4	0	0
7508	0	0	0	4	0	0		
7509	0	0	0	9	9	2		
7518	1	0	2	5	1	1		
7524	0	0	0	2	0	0		
MEAN	0	0	1	5	2	1	0	1
SD -	0.4	0.0	1.6	3.0	3.1	1.4	0.0	0.6
N	8	8	8	8	8	8	4	4

(--)-Data Unavailable



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Heinz Bodies

STUOY 10: 097
SEX: MALE
STUOY NO: 097
ABBR: HB UNITS: %

ALDDICE IID								
ANIMAL ID		Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26
	0 mg base/kg							
7531	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7532	0.5	0.0	0.0	0.0	0.3	0.0	0.0	0.0
7512	0.5	0.0	0.0	0.0	0.2	0.1	0.0	0.0
7515	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
7521	0.0	0.0	0.0	0.0	0.0	0.3		
7533	0.0	0.0	0.0	0.0	0.0	0.0		
7520	0.0	0.0	0.0	0.0	0.0	1.0		• •
7505	0.2	0.1	D.0	0.0	0.1	0.6		
MEAN	0.2	0.0	0.0	0.0	0.1	0.3	0.0	0.0
SD	0.26	0.04	0.00	0.00	0.11	0.37	0.00	0.00
N	8	8	8	8	8	8	4	4
CPOLID · 2M	:0.1 mg base/	ka/day						
7527	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0
7519	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
7529	0.1	0.0	0.0	0.2	0.2	0.3	0.0	0.0
7536	0.0	0.0	0.0	0.0	0.1	0.4	0.1	0.1
7503	0.0	0.0	0.0	0.0	0.1	1.1		
7523	0.0	0.1	0.0	0.0	0.0	0.1		
7517	0.2	0.0	0.1	0.0	0.0	0.1		
7528	0.0	0.0	0.0	0.0	0.0	0.0		
MEAN	0.0	0.0	0.0	0.0	0.1	0.4	0.0	0.0
SD .	0.07	0.04	0.04	0.07	0.08	0.35	0.05	0.05
N	8	8	8	8	8	8	4	4



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Heinz Bodies

STUDY ID: 097
SEX: MALE
STUDY NO: 097
ABBR: HB UNITS: %

	Week -3	Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26	
	2.0 mg base/								
7538	0.0	0.0	0.4	0.0	0.0	0.3	0.0	0.0	
7516	0.1	0.0	0.0	0.0	0.2	0.1	0.0	0.0	
7522	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	
7510	0.8	0.1	0.0	0.2	0.2	0.1	0.0	0.0	
7576	0.0	0.0	0.0	0.3	0.1	0.0			
7506	0.0	0.0	0.0	0.0	0.1	0.0			
7502	0.1	0.0	0.0	0.0	0.1	0.1	-		
7514	0.3	0.1	0.0	0.0	0.0	0.0			
MEAN	0.2	0.0	0.1	0.1	0.1	0.1	0.0	0.0	
SD	0.28	0.05	0.14	0.12	0.08	0.10	0.05	0.00	
N	8	8	8	8	8	8	4	4	
	6.0 mg base/								
7535	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	
7511	0.0	0.0	0.0	0.3	0.0	0.2	0.0	0.0	
7530	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	
7507	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	
7508	0.1	0.1	0.0	0.0	0.3	0.0			
7509	0.0	0.1	0.0	0.0	0.0	0.5			
<i>7</i> 518	0.2	0.0	0.0	0.0	0.2	0.0			
7524	0.0	0.0	0.1	0.0	0.2	0.0	*.*	**	
MEAN	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	
SD .	0.07	0.05	0.05	0.11	0.11	0.18	0.00	0.00	
N	8	8	8	8	8	8	4	4	



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: % Methemoglobin

STUDY ID: 097

SEX: MALE

STUDY NO: 097 ABBR: %METHGB

UNITS: %

ANIMAL ID	Week -3	Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26
GROUP: 1M	:0 mg base/kg	/day						
7531	1.3	0.9	0.6	0.7	1.0	0.7	0.8	0.5
7532	1.2	0.9	0.8	0.7	0.8	0.9	0.6	0.5
7512	3.9	2.2	1.0	0.9	1.3	1.1	0.6	0.8
75 15	1.2	1.3	0.8	0.6	0.7	0.7	0.8	0.8
7521	1.5	1.0	1.1	0.7	1.5	0.6		
7533	2.4	1.5	1.2	1.2	0.9	1.2		
7520	1.6	1.0	0.7	1.1	0.7	0.6		***
7505	2.0	1.3	0.9	0.9	0.7	0.6	~ •	
MEAN	1.9	1.3	0.9	0.9	1.0	0.8	0.7	0.7
SD	0.91	0.44	0.20	0.21	0.30	0.24	0.12	0.17
N	8	8	8	8	8	8	4	4
coord. On	0.1 mg base/	La falore						
7527		1.3	1.2	1.1	1.1	1.1	0.8	0.8
7519	4.4		2.2	1.7	0.7	2.7	0.8	0.9
7529	2.5	1.9	1.2	1.4	1.0	1.1	0.7	0.9
7536	1.4	1.0	0.9	1.2	0.9	1.0	0.5	0.8
7503	1.2	1.1	1.0	1.0	1.1	1.0		
7523	1.5	1.0	0.9	0.8	0.9	0.7		• •
7517	1.6	1.0	0.9	0.9	0.7	1.0		
	2.2	1.3	1.0	1.0	0.8	0.8		
7528	۷.۷	1.5	1.0	1.0	0.0	0.0		
MEAN	2.1	1.4	1.2	1.1	0.9	1.2	0.7	0.9
SD	1.03	0.63	0.44	0.29	0.16	0.63	0.14	0.06
N	8	8	8	8	8	8	4	4

INDIVIDUAL ANIMAL REPORT BY GROUP TEST: % Methemoglobin

STUDY ID: 097 ABBR: %METHGB UNITS: % ANIMAL ID Week -3 Week -1 Week 2 Week 4 Week 8 Week 13 Week 18 Week 26 GROUP: 3M:2.0 mg base/kg/day GROUP: 3M:2.0 mg base/kg/day
7538 2.3 2.1 16.1 21.0 21.6 19.2 1.4
7516 1.3 0.7 10.1 10.9 9.9 9.2 0.6
7522 3.3 2.8 19.8 18.8 17.8 17.4 0.8
7510 1.9 1.3 9.4 11.2 9.5 8.3 0.5
7576 0.9 0.9 10.7 12.0 10.9 10.9 -7506 2.2 1.7 11.0 14.8 11.5 10.8 -7502 1.4 1.1 12.3 13.4 12.8 11.8 -7514 2.3 1.9 14.6 16.2 15.0 15.2 --0.7 0.7
 2.0
 1.6
 13.0
 14.8
 13.6
 12.9
 0.8

 0.75
 0.70
 3.58
 3.67
 4.25
 3.96
 0.40

 8
 8
 8
 8
 8
 4
 MEAN 0.8 SD 0.14 8 8 GROUP: 4M:6.0 mg base/kg/day 1.0 14.3 14.9 16.3 14.4 11.0 1.6 23.1 21.7 22.8 19.2 2.8 22.2 22.3 23.1 25.5 1.0 9.2 10.0 11.5 11.5 0.8 16.8 17.0 17.0 11.4 1.8 13.0 16.6 20.0 22.4 1.8 25.7 24.4 25.1 27.3 14.4 3.8 11.0 1.9 19.2 5.3 25.5 4.0 7535 1.9 1.0 1.4 1.0 1.9 0.9 7530 2.3 7507 0.8 1.6 --7508 7509 1.3 7518 1.6 2.7 27.3 7524 1.8 3.8
 1.5
 16.8
 17.5
 18.8
 17.8
 3.8

 0.68
 6.23
 4.95
 4.75
 6.67
 1.40

 8
 8
 8
 8
 4
 MEAN 0.47 SD

8

(--)-Data Unavailable

N

8



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Platelets

STUDY ID: 097

SEX: MALE

STUDY NO: 097

UNITS: 10^3/ccm

ABBR: PLT								UNITS: 10 ³ /ccm
ANIMAL ID	Week -3	Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26
GROUP: 1M:	0 mg base/kg	g/day						
7531	347	290	248	308	284	255	284	259
7532	242	206	179	197	143	183	214	199
7512	421	322	295	274	275	259	295	294
7515	310	244	226	218	246	221	248	251
7521	363	309	184	228	235	262		
7533	481	437	352	369	291	330		**
7520	380	302	256	244	244	230		
7505	303	271	231	212	204	185	••	
MEAN	356	298	246	256	240	241	260	251
SD	74.1	67.8	56.9	58.0	48.6	47.7	36.8	39.2
N	8	8	8	8	8	8	4	4
GROUP: 2M:	0.1 mg base/	/kg/dav						
7527	381	365	216	285	276	267	334	281
7519	447	363	306	296	286	278	297	345
7529	350	324	231	263	243	257	310	317
7536	381	323	340	336	285	304	319	305
7503	352	337	321	274	284	272		
7523	302	256	202	194	175	231		
7517	392	340	290	267	263	296		
7528	493	379	318	377	319	340	••	
MEAN .	387	336	278	287	266	281	315	312
SD	59.5	38.1	53.5	54.0	42.8	32.9	15.6	26.6
N	8	8	8	8	8	8	4	4



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Platelets

STUDY ID: 097 STUDY NO: 097 SEX: MALE

UNITS: 10^3/ccm

ABBR: PLT								UNITS: 10 ³ /ccr
ANIMAL ID	Week -3	Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26
GROUP: 3M	2.0 mg base/	kg/day						
7538	373	340	245	111	177	223	342	302
7516	401	361	223	124	154	186	416	394
7522	406	346	124	115	175	187	346	258
7510	485	447	133	82	61	61	266	199
7576	369	317	108	39	63	82		
7506	402	379	115	185	299	355		
7502	280	247	159	104	150	156		
7514	608	439	67	142	192	229		
MEAN	416	360	147	113	159	185	343	288
SD	96.1	64.8	60.0	42.5	75.8	91.9	61.3	82.2
N	8	8	8	8	8	8	4	4
GROUP: 4M:	6.0 mg base/	kg/day						
7535	246	297	91	95	177	166	299	306
7511	391	376	121	132	403	569	518	310
7530	334	234	92	144	215	270	217	264
7507	438	344	97	62	86	110	221	264
7508	389	234	97	52	291	100		
7509	449	401	93	72	291	195		
7518	449	361	120	54	115	202		
7524	271	279	75	126	155	166		**
MEAN	371	316	98	92	217	222	314	286
SD	79.6	64.2	15.4	37.4	105.9	150.0	141.3	25.5
N	8	8	8	8	8	8	4	4

INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Prothrombin Time

STUDY ID: 097 STUDY NO: 097 ANIMAL ID Week -3 Week -1 Week 2 Week 4 Week 8 Week 13 Week 18 Week 26 _____ GROUP: 1M:0 mg base/kg/day g base/kg/day
6.9 7.2 6.9 7.2 7.0 7.1
7.0 7.2 7.3 7.0 7.0 7.2 6.9
7.3 7.0 7.2 7.0 7.5 7.2 7.1
8.2 8.0 8.3 7.9 7.1 8.0 7.8
7.2 7.0 7.3 6.9 7.1 7.2 -7.1 7.2 7.4 7.0 7.1 7.3 -7.0 7.0 7.2 7.0 7.1 7.1 -7.2 7.7 7.5 7.4 7.4 7.3 --7.5 7531 6.9 7.1 7512 7.3 7.8 8.3 7515 7521 7533 7520 7505 7.2 7.3 7.4 7.2 7.2 7.3 7.2 0.41 0.37 0.41 0.33 0.17 0.30 0.39 8 8 8 8 8 8 4 7.2 7.6 MEAN 0.53 8 GROUP: 2M:0.1 mg base/kg/day 7527 6.9 7.0 7.1 7.1 7.5 7.1 7.3 7.1 7.0 7.0 8.0 7.6 7.7 7.8 7.4 7.3 7.3 7.3 7.6 7.4 7.5 7.6 7.5 7.1 7.3 7.3 7.4 7.1 7.5 7.1 7.3 7.1 8.0 7.2 7.1 7.3 7.0 7.9 7.1 7.0 7.3 7529 7.8 8.0 7.9 7.4 7.4 7.1 7.2 7.5 7536 7.5 7.8 --7.3 7503 7523 7.2 7.4 7.3 7517 7.3 7528 7.3 7.3 7.5 7.2 7.5 7.3 0.27 0.33 0.27 0.19 0.30 0.27 8 8 8 8 8 8 8 MEAN 7.4 7.6 SD 0.41 0.32

8

(--)-Data Unavailable

N

INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Prothrombin Time

STUDY ID: 097
STUDY NO: 097
ABBR: PT

UNITS: sec

SEX: MALE

ADDK: FI								
	Week -3	Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26
	2.0 mg base/							
7538	7.3	7.2	7.3	6.9	7.1	7.2	7.3	7.4
7516	7.6	7.3	7.4	7.1	7.3	7.2	7.5	7.6
7522	7.3	7.3	7.1	6.8	7.2	7.1	7.3	7.4
7510	7.6	7.2	7.4	6.8	7.1	6.9	7.4	7.4
7576	7.1	7.2	7.0	6.9	7.0	7.0		
7506	7.1	7.0	7.1	6.8	7.0	6.9		
7502	7.3	7.2	7.1	6.8	7.2	7.2		
7514	7.3	7.0	7.0	6.9	6.9	6.9		
MEAN	7.3	7.2	7.2	6.9	7.1	7.1	7.4	7.5
SD	0.19	0.12	0.17	0.10	0.13	0.14	0.10	0.10
N	8	8	8	8	8	8	4	4
	6.0 mg base/		7.0	. 7		7.0	7 2	7 5
7535	7.2	7.0	7.0	6.7	8.0	7.0	7.2 7.0	7.5
7511	7.4	7.3	7.1	6.8	6.9	6.9		7.4
7530	7.2	7.1	7.1	6.9	6.9	7.0	7.1	7.3
7507	7.4	7.0	7.1	6.9	7.3	7.0	7.2	7.4
7508	7.3	7.2	7.1	6.9	7.1	7.1	+=	
7509	7.3	7.2	7.2	6.9	7.2	7.2		
7518	7.3	7.2	7.1	6.8	7.0	6.9	**	
7524	7.0	7.3	7.1	7.0	7.1	7.1		
MEAN	7.3	7.2	7.1	6.9	7.2	7.0	7.1	7.4
SD	0.13	0.12	0.05	0.09	0.36	0.10	0.10	0.08
N	8	8	8	8	8	8	4	4

INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Act. Partial Thrombo. Time

STUDY ID: 097
SEX: MALE
STUDY NO: 097
ABBR: APTT
UNITS: sec

		Week -1					Week 18	Week 26
	:0 mg base/kg							
7531	11.2	11.1	10.5	10.0	9.8	10.5	10.3	10.4
7532	12.4	11.6	10.9	10.8	9.2	10.9	11.1	11.1
7512	12.7	11.9	11.1	10.8	11.2	10.9	10.7	10.7
7515	12.6	12.3	11.5	10.9	11.9	10.8	10.9	11.1
7521	12.0	11.4	9.8	9.9	10.3	10.0		
7533	12.3	11.6	10.6	11.1	10.7	10.0		
7520	11.9	11.0	10.7	10.6	9.8	10.7		
7505	11.8	11.1	11.2	10.6	10.8	11.0		
MEAN	12.1	11.5	10.8	10.6	10.5	10.6	10.8	10.8
SD	0.49	0.45	0.52	0.43	0.87	0.40	0.34	0.34
N	8	8	8	8	8	8	4	4
GROUP: 2M	:0.1 mg base/	'kg/dav		*****				
7527		11.7	11.5	10.7	11.2	10.3	10.8	11.3
7519	11.7		11.1	11.2	10.5	11.1	10.3	10.4
7529	11.0	10.8	10.5	9.9	10.1	10.1	10.2	12.3
7536	11.4	11.3	10.8	11.0	11.0	10.7	10.5	10.5
7503	13.4	11.8	11.2	10.3	10.4	10.0		
7523	10.9	10.9	10.0	9.8	9.7	9.3		
7517	13.7	13.0	12.9	13.0	12.3	12.4		
7528	11.7	10.9	10.3	10.3	10.1	10.7		
MEAN	12.0	11.5	11.0	10.8	10.7	10.6	10.5	11.1
SD	1.04	0.72	0.90	1.03	0.82	0.92	0.26	0.88
N	8	8	8	8	8	8	4	4



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Act. Partial Thrombo. Time

STUDY ID: 097
STUDY NO: 097
ABBR: APTT
UNITS: sec

ANIMAL ID	Week -3	Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26
GROUP: 3M:	2.0 mg base/	kg/dav						
7538	11.8	12.3	11.0	10.7	10.7	11.2	10.2	10.5
7516	11.9	12.4	10.9	10.9	10.4	10.5	10.3	10.3
7522	11.2	10.2	10.3	10.9	9.8	9.9	9.8	10.3
7510	11.3	11.6	10.5	10.4	10.5	10.5	10.4	10.4
7576	11.5	11.1	10.5	10.7	9.9	10.1		
7506	10.9	10.8	10.1	10.3	10.0	10.2		
7502	11.8	10.9	10.3	9.8	10.0	10.2		
7514	11.6	10.9	10.6	10.4	10.5	10.2	**	
MEAN	11.5	11.3	10.5	10.5	10.2	10.4	10.2	10.4
SD	0.35	0.77	0.31	0.37	0.34	0.40	0.26	0.10
N	8	8	8	8	8	8	4	4

	6.0 mg base/						2000	
7535	12.3	12.0	11.2	11.4	10.6	10.8	10.6	10.7
7511	12.5	11.2	9.9	11.1	10.6	10.1	10.4	10.6
7530	11.8	12.0	10.8	11.0	10.2	11.0	10.8	10.5
7507	11.6	10.9	10.2	11.3	9.8	10.4	10.4	10.5
7508	11.9	12.3	11.2	11.2	10.7	10.8		
7509	11.9	11.5	10.6	11.1	10.7	10.9		-
7518	10.9	10.9	10.5	11.0	10.3	11.9		
7524	11.7	11.5	10.6	11.2	10.6	11.0		
MEAN	11.8	11.5	10.6	11.2	10.4	10.9	10.6	10.6
SD	0.48	0.53	0.45	0.14	0.32	0.52	0.19	0.10
N	8	8	8	8	8	8	4	4



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Leukocytes

STUDY ID: 097

SEX: MALE

STUDY NO: 097 ABBR: WBC

UNITS: 10³/cmm

ANIMAL ID	Week -3	Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26
GROUP: 1M	0 mg base/kg							
7531	11.0	12.0	16.4	11.8	10.6	12.1	10.9	9.5
7532	8.5	7.6	7.9	7.7	8.9	6.9	8.6	10.7
7512	9.2	10.4	9.0	8.7	10.3	9.1	11.4	11.2
75 15	6.9	6.9	6.5	6.7	6.4	7.0	6.9	7.7
7521	6.7	6.3	5.2	7.7	6.6	6.6	• •	
7533	10.1	8.9	10.3	12.9	8.8	9.5		
7520	7.6	7.0	9.4	8.6	7.3	8.5		
7505	8.5	6.8	7.4	8.8	7.8	7.6	***	
MEAN	8.6	8.2	9.0	9.1	8.3	8.4	9.5	9.8
SD	1.51	2.03	3.40	2.14	1.59	1.83	2.09	1.56
N	8	8	8	8	8	8	4	4
	0.4							
	0.1 mg base/		11.9	10.3	11.3	0.7	40 /	10 /
7527	8.6	8.1	7.1	7.7		9.3		10.6
7519	9.2	7.4			7.8	8.6	7.8	9.2
7529	7.3	12.6	6.9	6.5	7.6	6.6	9.2	11.0
7536	10.1	10.1	9.4	9.0	10.4	8.3	8.4	9.9
7503	8.2	8.6	8.3	6.9	8.4	9.4		
7523	6.9	9.5	8.4	7.8	5.5	6.3		
7517	14.9	12.4	13.1	11.7	10.8	11.0		
7528	11.1	13.2	15.1	10.0	10.4	9.9		
MEAN	9.5	10.2	10.0	8.7	9.0	8.7	9.0	10.2
SD	2.57	2.23	3.00	1.82	2.02	1.60	1.12	0.79
N	8	8	8	8	8	8	4	4

(--)-Data Unavailable

INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Leukocytes

STUDY NO: 097

SEX: MALE

ABBR: WBC								UNITS: 10 ³ /cm	m
		Week -1				Week 13			
	2.0 mg base/								
7538	7.6		10.0	9.0	10.6	9.9	7.9	8.9	
7516	9.8	10.4	11.7	10.4	8.7	11.1	8.8	7.7	
7522	7.3	7.3	9.8	9.4	8.7	9.2	5.4	7.6	
7510	9.1	7.9	8.7	10.3	8.6	12.2	7.4	10.0	
7576	9.9	6.0	8.6	11.0	10.3	11.6			
7506	11.6	12.5	10.2	11.6	9.0	12.7			
7502	7.9	8.2	8.5	9.4	11.3	12.2			
7514	10.1	9.6	17.1	13.4	12.5	12.3		• •	
MEAN	9.2	8.8	10.6	10.6	10.0	11.4	7.4	8.6	
SD	1.48	2.01	2.84	1.44	1.45	1.25	1.44	1.13	
N	8	8	8	8	8	8	4	4	
GROUP - AM:	6.0 mg base/	kg/day							
7535	6.5	9.1	10.3	11.3	12.7	13.1	9.4	7.9	
7511		8.5	7.2	7.6	11.7	10.5	8.5	8.2	
7530	9.9	10.1	9.4	11.1	10.7	14.5	10.2	7.7	
7507	7.8	10.7	8.3	8.2	9.6	10.0	10.0	8.9	
7508	8.9	9.2	8.6	8.4	10.1	9.3			
7509	10.0	10.1	9.4	11.2	13.6	15.3	• •		
7518	5.9	7.9	8.1	7.0	8.2	12.6			
7524	11.2	11.2	10.0	12.5	14.1	18.3	••		
MEAN .	8.5	9.6	8.9	9.7	11.3	13.0	9.5	8.2	
SD	1.81	1.12	1.05	2.08	2.05	3.04	0.76	0.53	
N	8	8	8	8	8	8	4	4	

(--)-Data Unavailable

INDIVIDUAL ANIMAL REPORT BY GROUP TEST: M. Neutrophils

STUDY ID: 097 STUDY NO: 097 SEX: MALE

ABBR: M. Neutrop

UNITS: 10^3/cmm

7.00.110								
		Week -1	Week 2	Week 4	Week 8		Week 18	Week 26
	0 mg base/kg							
7531	5.9	7.9	12.3	7.2	6.0	7.5	7.2	5.8
7532	4.8	4.7	5.5	4.5	6.2	4.4	5.8	7.3
7512	4.9	7.7	5.7	5.2	5.7	5.7	6.4	7.2
7515	3.4	4.3	4.0	4.2	4.4	5.0	4.6	5.2
7521	4.1	4.2	3.1	5.7	4.0	3.7		
7533	5.5	5.2	6.3	9.0	5.4	5.2		
7520	4.3	4.3	5.5	6.2	4.0	5.1		
7505	5.7	3.5	4.2	6.6	4.7	4.5		
MEAN	4.8	5.2	5.8	6.1	5.1	5.1	6.0	6.4
SD	0.86	1.66	2.82	1.56	0.89	1.13	1.10	1.04
N	8	8	8	8	8	8	4	4
cnown. Ou	:0.1 mg base/	len telas						
7527	5.9	5.0	7.0	6.0	7.6	5.4	6.7	8.0
7519	4.0	3.6	3.6	3.3	3.8	4.7	3.5	5.4
7529	4.5	10.6	4.0	3.1	3.7	3.4	5.7	8.4
7536	7.1	6.9	5.6	6.1	7.0	6.1	5.5	6.1
7503	5.2	4.8	4.6	3.4	5.1	5.3	7.7	0.1
7523	3.6	6.4	5.5	4.8	3.1	3.8		
7517	8.8	7.4	8.4	6.4	5.8	6.3		
7528	4.4	7.7	10.7	4.7	5.7	6.0		
1360	4.4	1.1	10.7	7.1	3.1	0.0	= 3	
MEAN	5.4	6.6	6.2	4.7	5.2	5.1	5.4	7.0
SD	1.76	2.16	2.41	1.35	1.61	1.08	1.34	1.45
30								

(--)-Data Unavailable

DRAFT

THIRTEEN WEEK ORAL TOXICITY STUDY OF WR 238605 WITH A THIRTEEN WEEK RECOVERY PERIOD IN DOGS

INDIVIDUAL ANIMAL REPORT BY GROUP TEST: M. Neutrophils

STUDY ID: 097

SEX: MALE

STUDY NO: 097 ABBR: M. Neutrop

UNITS: 10³/cmm

ANIMAL ID	Week -3	Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26
CPCHID. ZM.	2.0 mg base/	'ka/day						
7538	4.3	5.1	5.7	4.8	7.0	6.9	5.0	6.0
7516	6.9	7.0	7.5	6.8	5.0	8.4	5.5	4.5
7522	4.6	4.3	7.4	5.9	5.6	6.0	2.8	4.8
7510	6.2	4.4	5.6	6.1	4.0	8.3	3.5	6.7
7576	5.7	3.8	5.8	8.1	7.1	8.1		
7506	6.8	8.3	6.7	8.2	4.7	8.1		• •
7502	3.6	4.4	5.3	5.9	7.0	7.7		
7514	5.9	5.5	12.0	8.3	7.4	8.4		
MEAN	5.5	5.4	7.0	6.8	6.0	7.7	4.2	5.5
SD	1.21	1.55	2.19	1.31	1.31	0.86	1.26	1.03
N	8	8	8	8	8	8	4	4
GPOLIP - AM -	6.0 mg base/	ka/dav						
7535	4.4	6.7	7.5	8.5	10.0	10.0	7.2	5.0
7511	3.9	4.9	227 1229	4.0	6.2	7.5	5.7	4.1
7530	5.0	6.6	5.8	7.0	7.2	10.3	6.3	4.8
7507	4.4	6.3	5.2	4.4	5.9	5.7	5.2	6.0
7508	5.1	6.3	5.8	5.4	6.8	6.5		
7509	6.1	4.9	6.3	7.2	9.8	11.2		
7518	3.8	5.8	5.1	4.5	4.8	9.7	• •	
7524	6.4	5.7	5.2	8.8	10.2	12.4		
	•••							
MEAN	4.9	5.9	5.5	6.2	7.6	9.2	6.1	5.0
SD	0.96	0.71	1.36	1.90	2.10	2.35	0.86	0.78
N	8	8	8	8	8	8	4	4

(--)-Data Unavailable



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: I. Neutrophils

STUDY ID: 097

SEX: MALE

STUDY NO: 097 ABBR: I. Neutrop

UNITS: 10³/cmm

ANIMAL ID	Week -3	Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26
GROUP: 1M	:0 mg base/kg	/day						
7531	0.2	0.1	0.2	0.8	0.1	0.8	0.3	0.1
7532	0.0	0.2	0.1	0.2	0.3	0.3	0.0	0.1
7512	0.2	0.2	0.1	0.3	0.3	0.3	0.3	0.2
7515	0.0	0.1	0.4	0.3	0.2	0.4	0.2	0.3
7521	0.0	0.1	0.1	0.2	0.3	0.2		
7533	0.0	0.2	0.6	0.8	0.5	0.5		
7520	0.1	0.2	0.6	0.5	0.4	0.0		
7505	0.0	0.1	0.3	0.3	0.2	0.2		
MEAN	0.1	0.2	0.3	0.4	0.3	0.3	0.2	0.2
SD	0.09	0.05	0.21	0.25	0.12			
N	8	8	8	8	8	8	4	4
GROUP: 2M	:0.1 mg base/	kg/day						
7527	0.0	0.2	0.4	0.8	0.2	0.3	0.3	0.1
7519	0.1	0.0	0.3	0.3	0.2	0.1	0.1	0.4
7529	0.1	0.1	0.4	0.3	0.2	0.2	0.1	0.1
7536	0.0	0.2	0.4	0.4	0.2	0.2	0.4	0.3
7503	0.1	0.3	0.2	0.5	0.3	0.2		
7523	0.0	0.1	0.3	0.2	0.1	0.2	***	
7517	0.1	0.4	0.5	0.4	0.4	0.6		
	0.1	0.4	0.5	0.5	0.4	0.1		
7528	0.1							
7528 MEAN	0.1	0.2	0.4	0.4	0.3	0.2	0.2	0.2
		0.2 0.15	0.4	0.4 0.18	0.3 0.11	0.2 0.16	0.2 0.15	0.2 0.15

(--)-Data Unavailable



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: I. Neutrophils

STUDY ID: 097 STUDY NO: 097 SEX: MALE

ABBR: I.	Neutrop							UNITS: 10 ³ /cmm
ANIMAL ID	Week -3	Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26
GROUP: 3M:	2.0 mg base/	kg/day						
7538	0.0	0.3	0.2	0.7	0.3	0.3	0.5	0.0
7516	0.1	0.2	0.1	0.9	0.4	0.1	0.4	0.4
7522	0.1	0.2	0.5	0.4	0.0	0.1	0.1	0.2
7510	0.0	0.5	0.5	0.9	0.9	0.1	0.7	0.0
7576	0.3	0.0	0.4	0.7	0.2	0.5	* *	w. w.
7506	0.2	0.1	0.2	1.2	0.5	0.9		
7502	0.2	0.1	0.0	0.2	0.0	0.6		
7514	0.0	0.1	0.9	0.7	0.5	0.0		
MEAN	0.1	0.2	0.4	0.7	0.4	0.3	0.4	0.2
SD	0.11	0.16		0.31	150.5		VAECUEO 36	VEV.00.00
N	8	8	8	8	8	8	4	4
	6.0 mg base/							
7535	0.1	0.2	0.3	1001000000	0.3	0.3		0.3
7511	0.1		0.0	0.3	0.2	0.3		0.3
7530	0.2	0.0	0.4	0.7	0.5	0.7	0.1	0.2
7507	0.0	0.0	0.3	0.7	0.5	0.3	0.2	0.1
7508	0.1	0.1	0.2	0.3	0.5	0.2	• •	
7509	0.1	0.2	0.3	0.7	0.8	0.5	• •	
7518	0.0	0.1	0.2	0.4	0.8	0.1		
7524	0.0	0.1	0.3	0.4	0.6	0.9		
MEAN .	0.1	0.1	0.3	0.5	0.5	0.4	0.2	0.2
SD	0.07	0.08	0.12	0.18	0.21	0.27	0.06	0.10
N	8	8	8	8	8	8	4	4

(--)-Data Unavailable

DRAFT

THIRTEEN WEEK ORAL TOXICITY STUDY OF WR 238605 WITH A THIRTEEN WEEK RECOVERY PERIOD IN DOGS

INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Lymphocytes

STUDY ID: 097

SEX: MALE

STUDY NO: 097 ABBR: Lymphocyte

UNITS: 10^3/cmm

ANIMAL ID	Week -3	Week -1	Week 2	Week 4	Week 8		Week 18	Week 26
GROUP: 1M	:0 mg base/kg	/day						
7531	4.1	3.1	2.8	3.1	3.7	3.1	2.8	2.8
7532	3.1	1.9	1.7	2.4	1.8	1.6	2.1	2.9
7512	3.3	1.9	2.8	2.9	3.7	2.5	3.3	2.6
7515	2.5	1.9	1.8	1.7	1.5	1.1	1.7	2.0
7521	2.4	1.7	1.5	1.2	1.7	2.0		
7533	3.5	2.6	2.7	2.3	2.0	2.3		
7520	2.8	2.0	2.4	1.4	2.3	2.3		
7505	2.3	2.9	2.5	1.2	2.4	1.8		**
MEAN	3.0	2.3	2.3	2.0	2.4	2.1	2.5	2.6
SD	0.62	0.53	0.53	0.76	0.86	0.61	0.71	0.40
N	8	8	8	8	8	8	4	4
GROUP: 2M	:0.1 mg base/	kg/dav						
	1.7		3.2	2.9	2.4	2.1	2.7	1.4
7519	4.3		2.4	3.2	3.1	2.7	3.4	2.7
7529	2.2	1.1	1.8	2.3				
7536	2.4	2.3	2.7		2.5	1.6		2.4
7503	2.5	2.7	3.2	2.4	1.8	3.7		
7523	2.6	2.6	2.0	2.2	1.4	1.7		
7517	4.2	2.9	2.2	3.4	3.1	2.5		
7528	4.4	2.9	2.6	3.5				
MEAN	3.0						2.6	
SD	1.08	0.71						
N	8	8	8	8	8	8	4	4

(--)-Data Unavailable

DRAFT

THIRTEEN WEEK ORAL TOXICITY STUDY OF WR 238605 WITH A THIRTEEN WEEK RECOVERY PERIOD IN DOGS

INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Lymphocytes

STUDY ID: 097

SEX: MALE

STUDY NO: 097 ABBR: Lymphocyte

UNITS: 10^3/cmm

ANIMAL ID	Week -3	Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26
GROUP: 3M:	2.0 mg base/	'kg/day						
7538	2.6	2.5	2.9	2.5	1.9	1.4	1.8	2.0
7516	2.5	2.8	2.8	2.0	2.4	1.9	2.2	2.5
7522	2.1	2.3	1.2	1.5	1.7	1.7	1.7	1.2
75 10	1.9	1.9	1.7	2.2	2.3	2.6	2.4	2.5
7576	2.8	1.6	1.9	1.0	1.8	1.4		
7506	3.8	3.5	2.2	1.3	3.1	2.9		
7502	3.2	3.0	2.8	2.8	2.9	3.2		
7514	3.1	2.9	3.1	3.4	3.6	2.3	**	
MEAN	2.8	2.6	2.3	2.1	2.5	2.2	2.0	2.1
SD	0.62	0.62	0.68	0.81	0.68	0.68	0.33	0.61
N	8	8	8	8	8	8	4	4
CPOLID - AM -	6.0 mg base/	ka/day		• • • • • • • • • • • • • • • • • • • •				
7535	1.6	1.7	1.9	1.1	1.5	1.8	1.0	1.9
7511	3.3	2.8	3.9	2.8	3.6	2.2	2.0	3.3
7530	3.7	2.3	1.8	1.3	1.7	1.9	1.9	1.8
7507	2.7	3.2	2.1	2.2	2.4	2.5	2.9	2.3
7508	3.4	2.1	2.0	1.9	1.2	1.6		
7509	2.8	4.2	1.8	2.1	1.8	2.0		
7518	1.7	1.7	2.1	1.5	1.8	1.3		
7524	2.8	3.8	2.5	1.9	1.1	1.6		
MEAN	2.8	2.7	2.3	1.9	1.9	1.9	2.0	2.3
SD	0.76	0.94	0.70	0.55	0.80	0.38	0.78	0.68
N	8	8	8	8	8	8	4	4

(--)-Data Unavailable

INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Monocytes

STUDY ID: 097

SEX: MALE

STUDY NO: 097 ABBR: Monocytes

UNITS: 10³/cmm

ANIMAL ID	Week -3	Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26	
GROUP: 1M	:0 mg base/kg	/day							
7531	0.6	0.5	0.7	0.2	0.3	0.4	0.2	0.6	
7532	0.3	0.6	0.3	0.5	0.4	0.3	0.3	0.2	
7512	0.6	0.6	0.5	0.3	0.4	0.4	1.1	0.8	
7515	0.8	0.4	0.1	0.3	0.1	0.2	0.1	0.1	
7521	0.1	0.2	0.2	0.3	0.2	0.4			
7533	0.9	0.6	0.6	0.5	0.7	0.8			
7520	0.3	0.3	0.7	0.5	0.3	0.9			
7505	0.3	0.2	0.4	0.6	0.4	0.5			
MEAN	0.5	0.4	0.4	0.4	0.4	0.5	0.4	0.4	
SD	0.28	0.18	0.23	0.14	0.18	0.24	0.46	0.33	
N	8	8	8	8	8	8	4	4	
	:0.1 mg base/		4.0	0.5		4.0	0.5	0.5	
7527	100 G G	0.3	1.0	0.5	1.0	1.2	0.5	0.5	
7519	0.4	0.2	0.6	0.7	0.3	0.4	0.5	0.3	
7529	0.4	0.8	0.5	0.5	0.7	0.5	1.1	0.4	
7536	0.6	0.7	0.2	0.7	0.3	0.2	0.2	0.6	
7503	0.2	0.8	0.2	0.5	0.8	0.2			
7523	0.5	0.4	0.5	0.6	0.5	0.4	• •	• •	
7517	1.0	0.7	1.0	0.6	1.0	0.7		-	
7528	2.0	2.2	1.4	1.0	0.2	0.9	••		
MEAN	0.7	0.8	0.7	0.6	0.6	0.6	0.6	0.5	
SD	0.57	0.63	0.42	0.17	0.32	0.35	0.38	0.13	
N	8	8	8	8	8	8	4	4	

(--)-Data Unavailable

DRAFT

THIRTEEN WEEK ORAL TOXICITY STUDY OF WR 238605 WITH A THIRTEEN WEEK RECOVERY PERIOD IN DOGS

INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Monocytes

STUDY ID: 097

SEX: MALE

STUDY NO: 097 ABBR: Monocytes

UNITS: 10³/cmm

ANIMAL ID	Week -3	Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26
GROUP: 3M:	2.0 mg base/	kg/day						
7538	0.6	0.5	1.2	0.9	1.0	0.9	0.3	0.4
7516	0.3	0.3	1.2	0.5	0.7	0.6	0.5	0.3
7522	0.2	0.4	0.6	1.2	1.0	1.0	0.3	0.1
7510	0.5	0.7	0.4	0.8	0.7	0.7	0.3	0.4
7576	0.9	0.2	0.4	1.1	0.8	0.8		• •
7506	0.5	0.3	0.7	0.2	0.4	0.8		
7502	0.2	0.2	0.3	0.4	1.0	0.7		~ ~
7514	0.8	1.0	1.2	0.9	8.0	1.4		
MEAN	0.5	0.5	0.8	0.8	0.8	0.9	0.4	0.3
SD	0.26	0.28	0.39	0.35	0.21	0.25	0.10	0.14
N	8	8	8	8	8	8	4	4
		les falant						
3800P: 4M: 7535	6.0 mg base/ 0.4	0.5	0.5	1.0	0.6	0.9	0.6	0.2
7511	0.6	0.4	0.5	0.5	1.2	0.5	0.3	0.2
7530	0.6	0.9	1.4	1.9	1.0	1.3	1.0	0.5
7507	0.3	0.6	0.6	0.8	0.6	0.8	0.9	0.2
7508	0.2	0.5	0.5	0.5	0.9	0.6	0.9	0.2
7509	0.4	0.4	0.4	0.9	0.7	0.9		
DE 15000	0.4	0.2	0.7	0.4	0.6	1.3		
7518 751		(A) (Example)		45	F 450.00	100 C		
7524	1.1	0.6	0.8	1.4	1.4	2.0		
MEAN	0.5	0.5	0.7	0.9	0.9	1.0	0.7	0.3
	0.28	0.20	0.32	0.51	0.31	0.48	0.32	0.14
SD	0.20	0120						

(--)-Data Unavailable

DRAFT

THIRTEEN WEEK ORAL TOXICITY STUDY OF WR 238605 WITH A THIRTEEN WEEK RECOVERY PERIOD IN DOGS

INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Eosinophils

STUDY ID: 097

SEY- MALE

STUDY NO: 097 ABBR: Eosinophil

UNITS: 10^3/cmm

ANIMAL ID	Week -3	Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26
GROUP: 1M:	:0 mg base/kg	/day						
7531	0.2	0.4	0.5	0.5	0.4	0.2	0.3	0.3
7532	0.3	0.2	0.4	0.1	0.2	0.2	0.4	0.2
7512	0.3	0.0	0.0	0.0	0.2	0.2	0.2	0.4
7515	0.3	0.1	0.3	0.1	0.2	0.3	0.3	0.2
7521	0.1	0.1	0.4	0.4	0.4	0.3		
7533	0.2	0.4	0.1	0.3	0.2	0.8		
7520	0.2	0.2	0.2	0.0	0.2	0.3		
7505	0.3	0.1	0.0	0.1	0.2	0.5		
MEAN	0.2	0.2	0.2	0.2	0.3	0.4	0.3	0.3
SD	0.07	0.15	0.19	0.19	0.09	0.21	0.08	0.10
N	8	8	8	8	8	8	4	4
CPOLID · 2M	:0.1 mg base/	ra/dav						
7527	0.3	0.2	0.4	0.1	0.1	0.3	0.2	0.6
7519	0.4	0.1	0.2	0.2	0.3	0.7	0.3	0.5
7529	0.1	0.0	0.2	0.3	0.6	0.1	0.1	0.1
7536	0.0	0.0	0.5	0.3	0.4	0.3	0.2	0.5
7503	0.2	0.1	0.2	0.1	0.4	0.1		
7523	0.2	0.1	0.2	0.1	0.4	0.3		
7517	0.7	1.0	0.9	0.9	0.4	1.0		
7528	0.1	0.0	0.0	0.3	0.5	0.4		
	0.1	0.0	• • • •	0.5	0.5	5.4		
MEAN	0.3	0.2	0.3	0.3	0.4	0.4	0.2	0.4
SD	0.22	0.34	0.28	0.26	0.15	0.31	0.08	0.22
N	8	8	8	8	8	8	4	4

(--)-Data Unavailable



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Eosinophils

STUDY ID: 097

SEX: MALE

STUDY NO: 097 ABBR: Eosinophil

UNITS: 10^3/cmm

ANIMAL ID	Week -3	Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26	
GROUP: 3M	:2.0 mg base/	kg/day							
7538	0.2	0.3	0.0	0.1	0.4	0.4	0.3	0.6	
7516	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.0	
7522	0.2	0.1	0.1	0.4	0.4	0.4	0.5	1.4	
7510	0.5	0.4	0.5	0.3	0.7	0.5	0.6	0.4	
7576	0.2	0.3	0.1	0.1	0.4	0.8	••	• •	
7506	0.2	0.4	0.3	0.7	0.4	0.0			
7502	0.6	0.4	0.2	0.1	0.3	0.0			
7514	0.3	0.2	0.0	0.1	0.3	0.2			
MEAN	0.3	0.3	0.2	0.3	0.4	0.3	0.4	0.6	
SD	0.17	0.13	0.17	0.21	0.17	0.28	0.18	0.59	
N	8	8	8	8	8	8	4	4	
GROUP: 4M	:6.0 mg base/	kg/day							
7535	0.0	0.0	0.1	0.1	0.3	0.1	0.5	0.5	
7511	0.2	0.2	0.1	0.0	0.5	0.0	0.3	0.2	
7530	0.5	0.3	0.0	0.2	0.3	0.3	0.8	0.3	
7507	0.4	0.5	0.1	0.1	0.3	0.7	0.8	0.4	
7508	0.2	0.2	0.2	0.3	0.7	0.5		~ ~	
7509	0.6	0.3	0.7	0.3	0.5	0.8			
7518	0.1	0.2	0.0	0.3	0.2	0.3			
7524	0.9	1.0	1.2	0.1	0.8	1.3			
MEAN	0.4	0.3	0.3	0.2	0.5	0.5	0.6	0.4	
SD	0.30	0.30	0.43	0.12	0.21	0.42	0.24	0.13	

(--)-Data Unavailable



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Basophils

STUDY ID: 097

SEX. MALE

STUDY NO: 097 ABBR: Basophils

UNITS: 10^3/cmm

ANIMAL ID	Week -3	Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26
GROUP: 1M	:0 mg base/kg	/day						
7531	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7532	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7512	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7515	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7521	0.0	0.0	0.0	0.0	0.0	0.0		
7533	0.0	0.0	0.0	0.0	0.0	0.0		
7520	0.0	0.0	0.0	0.0	0.0	0.0		
7505	0.0	0.0	0.0	0.0	0.0	0.0		
1EAN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
N	8	8	8	8	8	8	4	4
	:0.1 mg base/							
7527	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7519	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7529	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7536	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7503	0.0	0.0	0.0	0.0	0.0	0.0		
7523	0.0	0.0	0.0	0.0	0.0	0.0		• =
7517	0.0	0.0	0.0	0.0	0.0	0.0		
7528	0.0	0.0	0.0	0.0	0.0	0.0	*=	
SEAN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

(--)-Data Unavailable



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Basophils

SEX: MALE

STUDY ID: 097 STUDY NO: 097

ABBR: Basophils UNITS: 10³/cmm

ANIMAL ID	Week -3	Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26
GROUP: 3M	1:2.0 mg base/	kg/day						
7538	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7516	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7522	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7510	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7576	0.0	0.0	0.0	0.0	0.0	0.0		
7506	0.0	0.0	0.0	0.0	0.0	0.0		
7502	0.0	0.0	0.0	0.0	0.0	0.0		
7514	0.0	0.0	0.0	0.0	0.0	0.0	**	**
MEAN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
N	8	8	8	8	8	8	4	4
GROUP: 4M	1:6.0 mg base/	kg/dav						
7535	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7511	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7530	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7507	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7508	0.0	0.0	0.0	0.0	0.0	0.0		
7509	0.0	0.0	0.0	0.0	0.0	0.0		
7518	0.0	0.0	0.0	0.0	0.0	0.0		
7524	0.0	0.0	0.0	0.0	0.0	0.0		
MEAN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
							3.00	

(--)-Data Unavailable



	RBC	MORPHOLOGY OB	SERVATIONS					
STUDY ID: 097 STUDY NO: 097								
ANIMAL ID	Week -3	Week -1	Week 2	Week 4				
7531	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight				
7532	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis, Slight				
7512	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight				
7515	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis, Slight				
7521	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight	Normal Red Blood Cells				
7533	Normal Red Blood Cells	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight				
7520	Anisocytosis, Slight	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis, Slight				
7505	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight	Normal Red Blood Cells				



RBC MORPHOLOGY OBSERVATIONS

STUDY ID: 097 STUDY NO: 097		GROUP: 1M : 0 mg bas	se/kg/day	SEX: MALE
ANIMAL ID	Week 8	Week 13	Week 18	Week 26
7531	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight
7532	Anisocytosis,Slight; Decreased Platelets, Slight	Anisocytosis,Slight	Anisocytosis,Slight; Macrocytes,Slight	Normal Red Blood Cells
7512	Normal Red Blood Cells	Anisocytosis,Slight	Anisocytosis,Slight	Poikilocytes,Slight; Anisocytosis, Moderate
7515	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight	Normal Red Blood Cells
7521	Anisocytosis, Slight	Anisocytosis, Slight		
7533	Normal Red Blood Cells	Anisocytosis,Slight		
7520	Anisocytosis,Slight	Anisocytosis, Slight		
7505	Anisocytosis.Slight	Anisocytosis.Slight		**



RBC MORPHOLOGY OBSERVATIONS

STUDY ID: 097 STUDY NO: 097		GROUP: 2M : 0.1 mg ba	A LEW S	SEX: MALE
ANIMAL ID	Week -3	Week -1	Week 2	Week 4
7527	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight	Normal Red Blood Cells
7519	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis, Slight
7529	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight
7536	Normal Red Blood Cells	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight
7503	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight
7523	Anisocytosis, Slight	Normal Red Blood Cells	Anisocytosis, Slight	Anisocytosis,Slight
7517	Anisocytosis,Slight	Normal Red Blood Cells	Anisocytosis,Slight	Anisocytosis,Slight
7528	Anisocytosis, Slight	Anisocytosis, Slight	Anisocytosis,Slight	Anisocytosis, Slight

DRAFT

THIRTEEN WEEK ORAL TOXICITY STUDY OF WR 238605 WITH A THIRTEEN WEEK RECOVERY PERIOD IN DOGS

RBC MORPHOLOGY OBSERVATIONS

STUDY ID: 097 STUDY NO: 097		GROUP: 2M : 0.1 mg b	ase/kg/day	SEX: MALE
ANIMAL ID	Week 8	Week 13	Week 18	Week 26
7527	Anisocytosis,Slight	Anisocytosis,Slight	Normal Red Blood Cells	Anisocytosis,Slight
7519	Anisocytosis, Slight	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis, Slight
7529	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis, Slight	Anisocytosis,Slight
7536	Anisocytosis,Slight	Normal Red Blood Cells	Anisocytosis,Slight	Anisocytosis,Slight; Clumped Platelets, Moderate
7503	Anisocytosis,Slight	Anisocytosis,Slight	••	
7523	Anisocytosis,Slight	Anisocytosis,Slight		••
7517	Anisocytosis,Slight	Anisocytosis,Slight	••	**
7528	Anisocytosis,Slight	Anisocytosis,Slight; Macrocytes,Slight	*-	



	RBC	MORPHOLOGY O	BSERVATIONS	
STUDY ID: 097 STUDY NO: 097		GROUP: 3M : 2.0 mg b	pase/kg/day	SEX: MALE
ANIMAL ID	Week -3	Week -1	Week 2	Week 4
7538	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight; Decreased Platelets, Slight
7516	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight
7522	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight; Decreased Platelets, Mod. to Marked	Anisocytosis,Slight; Decreased Platelets, Mod. to Marked
7510	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight; Decreased Platelets, Mod. to Marked	Anisocytosis,Slight; Microcytes,Slight; Decreased Platelets, Mod. to Marked
7576	Anisocytosis,Slight	Normal Red Blood Cells	Anisocytosis,Slight; Decreased Platelets, Mod. to Marked	Anisocytosis,Slight; Decreased Platelets, Mod. to Marked
7506	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight; Decreased Platelets, Slight	Anisocytosis, Moderate
7502	Hyposegmented Neutrophils,Moderate Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight; Decreased Platelets, Mod. to Marked;Large Platelets,Slight
7514	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight; Decreased Platelets, Mod. to Marked	Anisocytosis,Slight; Decreased Platelets, Slight



RBC MORPHOLOGY OBSERVATIONS

STUDY ID: 09 STUDY NO: 09	in the second se	GROUP: 3M : 2.0 mg i	pase/kg/day	SEX: MALE
ANIMAL ID	Week 8	Week 13	Week 18	Week 26
7538	Normal Red Blood Cells	Anisocytosis,Slight	Anisocytosis,Slight	Normal Red Blood Cells
7516	Normal Red Blood Cells;Decreased Platelets,Slight	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight
7522	Anisocytosis,Slight; Decreased Platelets, Slight	Normal Red Blood Cells	Anisocytosis,Slight	Normal Red Blood Cells
7510	Anisocytosis,Slight; Decreased Platelets, Mod. to Marked	Anisocytosis,Slight; Decreased Platelets, Mod. to Marked	Anisocytosis,Slight	Anisocytosis,Slight
7576	Anisocytosis,Slight; Decreased Platelets, Mod. to Marked	Decreased Platelets, Moderate;Normal Red Blood Cells	**	
7506	Anisocytosis,Slight	Anisocytosis, Slight	••	••
<i>7</i> 502	Anisocytosis,Slight; Decreased Platelets, Slight	Anisocytosis,Slight	,	
7514	Anisocytosis, Slight	Anisocytosis, Slight		



	RBC	MORPHOLOGY OF	SERVATIONS	
STUDY ID: 097 STUDY NO: 097		GROUP: 4M : 6.0 mg b	ase/kg/day	SEX: MALE
ANIMAL ID	Week -3	Week -1	Week 2	Week 4
7535	Normal Red Blood Cells	Normal Red Blood Cells	Anisocytosis,Slight; Large Platelets, Slight;Decreased Platelets,Mod. to Marked	Anisocytosis,Slight; Decreased Platelets, Mod. to Marked
7511	Anisocytosis,Slight	Anisocytosis, Moderate	Anisocytosis,Slight; Decreased Platelets, Mod. to Marked	Anisocytosis,Slight; Decreased Platelets, Slight
7530	Normal Red Blood Cells	Normal Red Blood Cells	Large Platelets, Slight;Decreased Platelets,Mod. to Marked;Anisocytosis, Moderate	Anisocytosis,Slight; Decreased Platelets, Slight
7507	Normal Red Blood Cells	Anisocytosis,Slight	Anisocytosis, Moderate;Decreased Platelets,Mod. to Marked	Anisocytosis,Slight; Decreased Platelets, Mod. to Marked
7508	Normal Red Blood Cells	Anisocytosis,Slight	Anisocytosis,Slight; Decreased Platelets, Mod. to Marked	Anisocytosis,Slight; Decreased Platelets, Mod. to Marked
7509	Normal Red Blood Cells	Anisocytosis,Slight	Anisocytosis,Slight; Decreased Platelets, Mod. to Marked	Decreased Platelets, Mod. to Marked
7518	Anisocytosis,Slight	Normal Red Blood Cells	Anisocytosis,Slight; Decreased Platelets, Mod. to Marked	Polychromasia,Slight Anisocytosis,Slight; Decreased Platelets, Mod. to Marked
7524	Anisocytosis,Slight	Anisocytosis,Slight	Polychromasia,Slight Anisocytosis,Slight; Large Platelets, Slight;Decreased Platelets,Mod. to Marked	Anisocytosis,Slight; Decreased Platelets, Slight



RBC MORPHOLOGY OBSERVATIONS

STUDY ID: 097 STUDY NO: 097		GROUP: 4M : 6.0 mg b	ase/kg/day	SEX: MALE
ANIMAL ID	Week 8	Week 13	Week 18	Week 26
7535	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight; Macrocytes,Slight	Anisocytosis,Slight
7511	Anisocytosis,Slight	Anisocytosis,Slight; Increased Platelets, Slight	Anisocytosis,Slight; Increased Platelets, Slight	Anisocytosis,Slight; Clumped Platelets, Moderate
7530	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight; Macrocytes,Slight	Anisocytosis,Slight
7507	Anisocytosis,Slight; Decreased Platelets, Moderate	Anisocytosis,Slight; Decreased Platelets, Slight	Anisocytosis,Slight; Macrocytes,Slight	Normal Red Blood Cells
7508	Anisocytosis,Slight; Decreased Platelets, Moderate	Anisocytosis,Slight; Decreased Platelets, Slight		
7509	Anisocytosis,Slight; Decreased Platelets, Moderate	Anisocytosis,Slight; Macrocytes,Slight		
7518	Anisocytosis,Slight; Decreased Platelets, Moderate	Anisocytosis,Slight		·
7524	Anisocytosis,Slight	Anisocytosis,Slight		

INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Erythrocytes

STUDY ID: 097
STUDY NO: 097
ABBR: RBC
UNITS: 10^6/cmm

ABBR: RBC								UNITS: 10^6/cmm
ANIMAL ID	Week -3	Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26
CDOUD. 15	:0 mg base/kg							
7557	6.97	7.11	6.29	6.40	6.16	6.25	7.35	6.70
7541		6.30	6.70	6.63	6.66	7.05	7.20	
7566		6.26	6.63	6.61	6.26			
7549	6.52	6.16	6.23	6.20	6.36		6.87	
	- A - ST	5.93	6.38	6.15	6.75			(E/AE/AREA)
7555 7558	6.07	6.48	5.75	5.55	5.63	6.88		
7573	5.90	5.99	6.65	6.26	6.84			
7542	6.37	6.70	6.44	6.70	6.78	0.40		••
MEAN	6.40	6.37	6.38	6.31	6.43	6.59	7.04	7.07
SD	0.324	0.391	0.309	0.372	0.413	0.322	0.280	0.298
N	8	8	8	8	8			4
GROUP: 2F	:0.1 mg base/	/kg/day				• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	
7543		6.34	6.56	6.50	6.88	6.26	6.97	7.19
7553	6.66	6.58	6.86	6.52	6.72	7.13	6.94	5.48
7545	6.98	6.70	6.33	6.43	6.52	6.57	7.23	7.07
7552	5.98	6.00	6.70	6.21	6.47	6.58	7.11	7.02
7569	6.28	6.29	5.90	6.66	6.83	6.54		
7560	6.65	6.83	6.00	6.61	6.78			
7567	6.54	6.06	6.32	6.13				
7550	6.09	6.15	6.20	6.06				
MEAN	6.54	6.37	6.36	6.39	6.48	6.75	7.06	6.69
SD	0.404	0.305	0.333					
N	8	8	8	8	8	8	4	4
. Pi	O	U	o o	o	O	O	4	~

INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Erythrocytes

STUDY ID: 097 STUDY NO: 097 SEX: FEMALE

STUDY NO: 097 ABBR: RBC

UNITS: 10^6/cmm

ABBK: KBC								UNITS: 10 0/CIII
ANIMAL ID	Week -3	Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26
GROUP: 3F:	2.0 mg base/	kg/day						
7562	6.13	6.32	6.05	6.20	6.68	6.65	7.35	6.54
7548	6.66	6.33	6.28	5.99	6.00	6.00	6.29	7.00
7571	6.00	7.27	6.72	5.18	6.62	7.61	7.80	7.76
7561	7.13	7.07	7.09	6.14	5.81	6.16	5.99	6.82
7564	6.54	6.11	6.14	5.81	5.99	6.07	-	
7574	6.25	6.01	6.04	5.57	5.90	6.15		
7556	6.44	6.59	6.63	6.08	7.13	6.76		
7572	6.76	6.55	5.92	5.37	5.94	7.16		-
MEAN	6.49	6.53	6.36	5.79	6.26	6.57	6.86	7.03
SD	0.367	0.443	0.411		0.484	0.585	0.857	0.522
N	8	8	8	8	8	8	4	4
GROUP: 4F:	:6.0 mg base/	kg/day						
7539	6.15	6.05	6.23	5.11	6.23	6.43	5.51	6.33
7563	6.42	5.98	5.73	6.26	6.66	6.65	7.54	7.80
7540	6.26	5.80	5.33	5.09	5.64	6.50	5.97	6.47
7554	6.37	6.56	5.85	4.64	6.16	6.12	5.36	7.18
7568	6.52	6.43	5.66	5.21	6.42	5.78		**
7544	6.16	5.12	5.56	5.26	6.00	6.72		
7546	6.91	6.25	6.18	5.12	6.51	5.64	**	
1740		200			/ 00	E E0		
7551	5.99	6.73	6.16	5.58	6.00	5.50		
	5.99 6.35	6.73	5.84	5.58		6.17		6.95
7551	*** * * * ***							



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Hemoglobin

STUDY NO: 097 UNITS: g/dL ABBR: THGB ANIMAL ID Week -3 Week -1 Week 2 Week 4 Week 8 Week 13 Week 18 Week 26 GROUP: 1F:0 mg base/kg/day 17:0 mg base/kg/day
17.0 17.3 15.8 15.7 16.1 15.6 18.3
16.6 15.2 16.9 17.0 17.9 17.8 18.4
15.4 15.1 16.0 15.7 16.1 16.1 16.6
15.5 14.6 14.9 14.9 15.6 15.3 16.9
15.0 14.8 15.9 15.4 14.5 17.3 -16.2 15.9 14.5 14.3 14.4 16.5 -14.0 14.7 16.0 15.1 18.0 17.2 -15.6 16.3 15.8 16.6 14.5 16.2 --19.3 7541 7566 17.9 7549 17.3 7555 7558 7573 7542 15.5 15.7 0.94 0.73 8 8 15.9 16.5 1.45 0.87 8 8 15.7 15.6 17.6 MEAN 17-8 0.88 0.87 SD 0.95 0.93 1.18 8 8 8 4 GROUP: 2F:0.1 mg base/kg/day 14.5 15.1 15.2 16.4 15.1 16.0 16.7 16.2 17.5 17.6 16.9 15.7 16.0 17.4 16.8 14.3 16.7 15.4 16.6 16.2 15.5 13.7 16.6 17.5 16.2 15.2 13.7 15.3 15.7 16.2 14.5 15.1 14.5 13.6 18.6 15.4 15.7 15.4 16.0 16.8 15.1 16.8 17.6 17.2 16.7 7543 13.8 7553 16.3 16.8 16.2 18.5 7545 17.0 17.7 7552 17.6 17.3 14.7 15.6 7569 7560 14.5 --15.6 7567 7550 15.3 15.7 15.3 15.3 15.6 16.3 16.7 17.5 16.5 0.90 0.88 1.16 0.66 1.30 1.05 0.73 1.81 8 8 8 8 8 8 4 4 MEAN SD N



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Hemoglobin

STUDY ID: 097
SEX: FEMALE
STUDY NO: 097
ABBR: THGB
UNITS: g/dL

ABBR: THG	8							UNITS: g/	'dL
ANIMAL ID	Week -3	Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26	
CDOUD. 75	:2.0 mg base/	les (dos							
			15 5	15.8	10 /	17.3	18.8	14.7	
7562	15.1	15.7	15.4	15.2	14.9	14.7	15.8		
7548			16.7					17.3	
7571		18.0		12.9	16.2	18.6			
7561		17.3	17.1	15.4	15.0	14.7			
7564	14.7	14.1	14.2	13.5	14.9				
7574	15.5	14.9	15.1	14.2	15.6	15.8			
7556	15.8	16.2	16.3						
7572	15.9	15.9	14.3	13.1	14.3	16.9	-		
MEAN	15.6	16.0	15.6	14.4	15.9	16.0	17.2	17.4	
SD	0.86	1.24	1.06	1.13	1.47	1.53	2.32	1.23	
N	8	8	8	8	8	8	4	4	
	:6.0 mg base/		45.7	47.4	45.5			47.0	
7539			15.7			16.7			
7563		15.7	15.1	14.5				20.000	
7540	A STATE A	14.9	13.5	13.1	13.9	20.21 2 30	200000000000000000000000000000000000000	1000 B TO	
7554	15.6	16.1	14.5	11.5	15.8	10(2) 2(2)	100000000	1000 (012	
7568	16.8	16.2	14.4	13.3	16.8	14.2			
7544	15.0	12.4	13.8	13.0	14.7	15.7			
7546	15.7	14.8	14.2	11.9	14.5	13.3			
7551	15.3	17.2	16.0	14.6	14.9	14.3			
MEAN	15.8	15.3	14.7	13.1	15.4	15.4	15.5	17.4	
SD	0.62	1.42	0.88	1.09	1.05	1.28	2.38	1.71	
N	8	8	8	8	8	8	4	4	

.....



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Hematocrit

STUDY ID: 097
STUDY NO: 097
ABBR: HCT
STUDY NO: 097
UNITS: %

ANIMAL ID	Week -3	Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26
GROUP: 1F	0 mg base/kg	/day						
7557	49.3	49.6	43.5	44.4	42.9	43.3	51.5	46.1
7541	48.4	45.8	49.2	48.4	47.6	50.3	51.8	53.7
7566	45.6	43.8	46.1	46.3	43.6	45.8	46.6	51.0
7549	46.0	43.1	43.2	43.0	44.6	43.5	47.8	48.6
7555	43.5	42.0	45.0	43.1	42.2	48.1		
7558	47.0	46.5	41.5	40.5	40.7	45.9		
7573	41.2	41.6	45.4	43.5	46.9	47.3		
542	45.5	46.8	44.2	46.6	46.6	45.4		
EAN	45.8	44.9	44.8	44.5	44.4	46.2	49.4	49.9
SD	2.59	2.75	2.30	2.51	2.47	2.34	2.62	3.25
N	8	8	8	8	8	8	4	4
noun. 35	:0.1 mg base/	ba (day						
7543	48.3		43.6	43.9	45.8	42.3	47.3	48.4
T 10 10 10 10 10 10 10 10 10 10 10 10 10	47.2		47.8	45.4	46.8	49.7	1000	38.3
7545	50.2		45.6	46.0	46.9		51.4	
7552	42.6	42.2	46.6	43.2	44.5	48.0		47.7
7569	45.6	45.1	40.5	47.2	48.2	46.5		
7560	44.2	45.1	40.1	44.1	44.7	45.0		
7567	45.6	42.3	43.7	42.2	39.5	53.6		e
7550	43.8	43.6	43.6	42.7	42.2	45.1	••	
MEAN .	45.9	44.4	43.9	44.3	44.8	47.2	49.0	46.1
SD	2.52	2.07	2.72	1.73	2.83		1.75	5.24
		8	8	8	8	8	4	



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Hematocrit

STUDY ID: 097
STUDY NO: 097
ABBR: HCT
UNITS: %

ABBK: HLI								UNITS:
ANIMAL ID	Week -3	Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26
GROUP: 3F	:2.0 mg base/	kg/day						
7562	43.8	45.3	43.1	46.1	49.1	48.5	52.8	46.2
7548	47.1	44.3	43.4	42.9	42.5	41.6	43.3	47.8
7571	42.8	51.9	47.8	38.7	47.9	54.3	55.5	53.9
7561	51.7	49.8	49.9	44.1	40.7	41.6	41.1	46.1
7564	43.9	41.1	41.0	40.1	40.4	40.9		
7574	44.4	42.9	43.5	41.8	43.1	44.9		
7556	45.5	46.8	47.2	44.1	50.3	46.6		
7572	46.7	45.9	41.7	38.9	42.1	49.4	**	
MEAN	45.7	46.0	44.7	42.1	44.5	46.0	48.2	48.5
SD	2.83	3.52	3.19	2.69	3.95	4.68	7.04	3.68
N	8	8	8	8	8	8	4	4
	:6.0 mg base/		44.7	70.7	// 7	48.0	40.0	
7539	45.7	44.5		39.7	46.7	48.0	40.9	46.1
7563	47.4	44.1	42.8	42.2	47.8	47.1	54.1	54.3
7540	45.8	41.6	38.6	37.8	39.9	46.3	43.3	45.2
7554	46.2	47.1	42.4	34.8	45.2	46.9	40.8	50.3
7568	47.7	46.3	41.0	38.7	45.7	40.8		
7544	43.2	36.0	38.8	37.5	40.5	44.1		
7546	46.6	41.5	41.3	36.6	42.2	39.2	••	
7551	45.3	50.3	45.3	43.1	44.4	41.4	••	
MEAN	46.0	43.9	41.9	38.8	44.1	44.2	44.8	49.0
SD	1.40 8	4.32 8	2.45 8	2.79	2.89	3.36 8	6.32	4.19
N				8			4	4

INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Mean Corpuscular Volume

STUDY 1D: 097

SEX: FEMALE
STUDY NO: 097

ABBR: MCV

UNITS: fL

ANIMAL ID	Week -3	Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26
GP(II)	1F:0 mg bas	e/kn/dav						
7557	70.7	69.8	69.2	69.4	69.6	69.3	70.1	68.8
7541	73.6	72.7	73.4	73.0	71.5	71.3	71.9	73.1
7566	71.6	70.0	69.5	70.0	69.6	69.5	69.0	70.2
7549	70.6	70.0	69.3	69.4	70.1	69.8	69.6	69.9
7555	71.7	70.8	70.5	70.1	68.8	69.9		
7558	73.2	71.8	72.2	73.0	72.3	72.1		
7573	69.8	69.4	68.3	69.5	68.6	68.5		
7542	71.4	69.9	68.6	69.6	68.8	70.9		
MEAN	71.6	70.6	70.1	70.5	69.9	70.2	70.2	70.5
SD	1.29	1.14	1.80	1.56	1.34	1.18	1.25	1.83
N	8	8	8	8	8	8	4	4
				• • • • • • • • • • • • • • • • • • • •				
	2F:0.1 mg b			/= F				20070
7543		66.9	66.5	67.5	66.6	67.6	67.9	67.3
7553	70.9	70.4	69.7	69.6	69.6	69.7	69.6	69.9
7545	71.9	71.3	72.0	71.5	71.9	71.8	71.1	70.4
7552	71.2	70.3	69.6	69.6	68.8	72.9	69.1	67.9
7569	72.6	71.7	71.1	70.9	70.6	71.1		
7560	66.5	66.0	66.8	66.7	65.9	65.1	• •	
7567	69.7	69.8	69.1	68.8	69.1	70.1		
7550	71.9	70.9	70.3	70.5	71.3	70.7	••	
MEAN	70.3	69.7	69.4	69.4	69.2	69.9	69.4	68.9
SD	2.16	2.08	1.92	1.66	2.13	2.48	1.33	1.51
N	8	8	8	8	8	8	4	4

INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Mean Corpuscular Volume

STUDY ID: 097
SEX: FEMALE
STUDY NO: 097
ABBR: MCV
UNITS: fL

NIMAL IO	Week -3	Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26
GROUP:	3F:2.0 mg	base/kg/day						
7562	71.5	71.7	71.2	74.4	73.5	72.9	71.8	70.6
7548	70.7	70.0	69.1	71.6	70.8	69.3	68.8	68.3
7571	71.3	71.4	71.1	74.7	72.4	71.4	71.2	69.5
561	72.5	70.4	70.4	71.8	70.1	67.5	68.6	67.6
7564	67.1	67.3	66.8	69.0	67.4	67.4		
574	71.0	71.4	72.0	75.0	73.1	73.0		
556	70.7	71.0	71.2	72.5	70.5	68.9		
572	69.1	70.1	70.4	72.4	70.9	69.0	••	(0.00)
EAN	70.5	70.4	70.3	72.7	71.1	69.9	70.1	69.0
SD	1.67	1.41	1.64	2.00	1.95	2.24	1.64	1.32
N	8	8	8	8	8	8	4	4
GROUP.	4F•6 0 mg	base/kg/day						
539	74.3	73.6	71.7	77.7	75.0	74.7	74.2	72.8
563	73.8	73.7	74.7	68.8	71.8	70.8	71.8	69.6
540	73.2	71.7	72.4	74.3	70.7	71.2	72.5	69.9
5 54	72.5	71.8	72.5	75.0	73.4	76.6	76.1	70.1
568	73.2	72.0	72.4	74.3	71.2	70.6		
5 44	70.1	70.3	69.8	71.3	67.5	65.6		
546	67.4	66.4	66.8	71.5	68.8	69.5		
551	75.6	74.7	73.5	77.2	74.0	75.3		
	72.5	71.8	71.7	73.8	71.6	71.8	73.7	70.6
EAN								
SD SD	2.60	2.58	2.43	3.05	2.57	3.59	1.92	1.48

INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Mean Corpuscular Hemoglobin

STUDY ID: 097
STUDY NO: 097
ABBR: TMCH
UNITS: pg

Week 18 Week 26	Week 13	Week 8	Week 4	Week 2	Week -1	Week -3	
						0 mg base/kg	
24.9 24.6	25.0	26.1	24.5	25.1	24.3	24.4	7557
25.6 26.3	25.2	26.9	25.6	25.2	24.1	25.2	7541
24.6 24.7	24.4	25.7	23.8	24.1	24.1	24.2	7566
24.6 24.9	24.6	24.5	24.0	23.9	23.7	23.8	7549
••	25.1	23.7	25.0	24.9	25.0	24.7	7555
	25.9	25.6	25.8	25.2	24.5	25.2	7558
	24.9	26.3	24.1	24.1	24.5	23.7	7573
	25.3	23.7	24.8	24.5	24.3	24.5	7542
24.9 25.1	25.1	25.3	24.7	24.6	24.3	24.5	MEAN
	0.46	1.21	0.74	0.54	0.38	0.57	SD
	8	8	8	8	8	8	N
					ro/dav	0.1 mg base/	GROUP: 2F-0
24.1 23.9	24.1	23.8	23.4	23.0		AND THE RESIDENCE OF THE PARTY	
			73.75.5	to the same of the same			
	200 (0.00 (0)	Company of the					
	24.6						
	24.8						
	23.4						
	24.3					() ()	
	26.3	27.0	25.4	25.3	25.0	25.1	
24.8 24.7	24.7	25.2	24.4	24.4	24.0	24.1	MEAN
		1.44		VE 1975-19			100000000000000000000000000000000000000
	0.89	64.64	0.84	1.17	1.00	1.05	SD
5 6 8 4 3 5 5	24.1 24.7 25.6 24.6 24.8 23.4 24.3 26.3	23.8 26.0 26.7 25.7 25.6 23.2 23.8 27.0	23.4 24.8 24.9 24.8 24.9 23.1 23.7 25.4	23.0 24.3 24.8 24.9 26.3 22.8 23.9 25.3	0.38 8 8 22.9 24.3 25.2 23.8 24.6 22.3 23.9 25.0	0.57 8 0.1 mg base/ 23.5 24.5 24.4 24.6 24.8 21.8 23.9 25.1	N GROUP: 2F:0 7543 7553 7545 7552 7569 7560 7567 7550

DRAFT

THIRTEEN WEEK ORAL TOXICITY STUDY OF WR 238605 WITH A THIRTEEN WEEK RECOVERY PERIOD IN DOGS

INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Mean Corpuscular Hemoglobin

STUDY ID: 097 STUDY NO: 097 ABBR: TMCH SEX: FEMALE

UNITS: pg

	JH							ON112: b
ANIMAL ID	Week -3	Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26
GROUP: 3F	:2.0 mg base/	kg/day						
7562	24.6	24.7	25.6	25.5	27.5	26.0	25.6	25.5
7548	24.5	24.8	24.5	25.4	24.8	24.5	25.1	24.7
7571	24.2	24.8	24.9	24.9	24.5	24.4	24.9	24.7
7561	24.0	24.5	24.1	25.1	25.8	23.9	24.4	24.2
7564	22.5	23.1	23.1	23.2	24.9	23.2		
7574	24.8	24.8	25.D	25.5	26.4	25.7		
7556	24.5	24.6	24.6	24.8	24.8	24.0		
7572	23.5	24.3	24.2	24.4	24.1	23.6		
MEAN	24.1	24.5	24.5	24.9	25.4	24.4	25.0	24.8
SD	0.76	0.57	0.74	0.77	1.14	0.98		
N	8	8	8	8	8	8	4	4
CDOVID. AF	:6.0 mg base/	ka/day						
7539	25.0	25.1	25.2	25 /		-04-1		
1 2 4 1	23.0				25.2	26.0	26.11	25.6
7563	25 7			25.6	25.2 25.1	26.0	26.0 25.1	25.6 25.3
	25.7	26.3	26.4	23.7	25.1	25.1	25.1	25.3
7540	25.7	26.3 25.7	26.4 25.3	23.7 25.7	25.1 24.6	25.1 25.2	25.1 25.6	25.3 24.7
7540 7554	25.7 24.5	26.3 25.7 24.5	26.4 25.3 24.8	23.7 25.7 24.8	25.1 24.6 25.6	25.1 25.2 25.3	25.1 25.6 25.2	25.3
7540 7554 7568	25.7 24.5 25.8	26.3 25.7 24.5 25.2	26.4 25.3 24.8 25.4	23.7 25.7 24.8 25.5	25.1 24.6 25.6 26.2	25.1 25.2 25.3 24.6	25.1 25.6	25.3 24.7 24.7
7540 7554 7568 7544	25.7 24.5 25.8 24.4	26.3 25.7 24.5 25.2 24.2	26.4 25.3 24.8 25.4 24.8	23.7 25.7 24.8 25.5 24.7	25.1 24.6 25.6 26.2 24.5	25.1 25.2 25.3 24.6 23.4	25.1 25.6 25.2	25.3 24.7 24.7
7540 7554 7568 7544 7546	25.7 24.5 25.8	26.3 25.7 24.5 25.2	26.4 25.3 24.8 25.4	23.7 25.7 24.8 25.5	25.1 24.6 25.6 26.2	25.1 25.2 25.3 24.6	25.1 25.6 25.2	25.3 24.7 24.7
7540 7554 7568 7544 7546 7551	25.7 24.5 25.8 24.4 22.7 25.5	26.3 25.7 24.5 25.2 24.2 23.7 25.6	26.4 25.3 24.8 25.4 24.8 23.0 26.0	23.7 25.7 24.8 25.5 24.7 23.2 26.2	25.1 24.6 25.6 26.2 24.5 23.7 24.8	25.1 25.2 25.3 24.6 23.4 23.6 26.0	25.1 25.6 25.2 	25.3 24.7 24.7
7563 7540 7554 7568 7544 7546 7551 MEAN SD	25.7 24.5 25.8 24.4 22.7	26.3 25.7 24.5 25.2 24.2 23.7	26.4 25.3 24.8 25.4 24.8 23.0	23.7 25.7 24.8 25.5 24.7 23.2	25.1 24.6 25.6 26.2 24.5 23.7	25.1 25.2 25.3 24.6 23.4 23.6	25.1 25.6 25.2 	25.3 24.7 24.7

INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Mean Copuscular Hemo. Conc.

STUDY ID: 097
STUDY NO: 097
ABBR: TMCHC
UNITS: g/dL

ABBR: TI	MCHC							UNITS: g/dL
ANIMAL I	D Week -3			Week 4		Week 13		Week 26
GROUP: 1	F:0 mg base/kg							
7557		34.9	36.3	35.4	37.5	36.0	35.5	35.8
7541	34.3	33.2	34.3	35.1	37.6	35.4	35.5	35.9
7566	33.8	34.5	34.7	33.9	36.9	35.2	35.6	35.1
7549	33.7	33.9	34.5	34.7	35.0	35.2	35.4	35.6
7555	34.5	35.2	35.3	35.7	34.4	36.0		• •
7558	34.5	34.2	34.9	35.3	35.4	35.9		
7573	34.0	35.3	35.2	34.7	38.4	36.4		
7542	34.3	34.8	35.7	35.6	34.4	35.7	••	
MEAN	34.2	34.5	35.1	35.1	36.2	35.7	35.5	35.6
SD	0.33	0.71	0.66	0.60	1.58	0.43	0.08	0.36
N	8	8	8	8	8	8	4	4
	F:0.1 mg base/	ko/day						
	34.6		34.6	34.6	35.8	35.7	35.5	35.5
7553	0.000 N 20.000	34.6	34.9					
7545	33.9	35.4	34.4	34.8	4000 3 1			
7552	34.5	33.9	35.8	35.6	37.3	VEX.20027929		36.3
7569	34.2	34.4	35.1	35.2	36.3			
7560	32.8	33.7		34.7	35.1	SUMMOOD INCOME.		**
7567	34.2	34.3	34.6		(1900) 5 (100)			
7550	34.9	35.3	36.0	36.1	37.9	37.3	••	••
MEAN .	34.2	34.5	35.0	35.1	36.4	35.4	35.7	35.8
SD	0.64	0.61	0.65	0.61	1.23	1.04	0.22	0.39
N	8	8	8	8	8	8	4	4

⁽⁻⁻⁾⁻Data Unavailable

INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Mean Copuscular Hemo. Conc.

STUDY ID: 097
SEX: FEMALE
STUDY NO: 097
ABBR: TMCHC
UNITS: g/dL

ABBR: TMC	нс							UNITS: g/dL
ANIMAL ID	Week -3	Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26
GROUP: 3F:	2.0 mg base/	/kg/day						
7562	34.5	34.4	36.0	34.3	37.5	35.7	35.6	36.1
7548	34.6	35.4	35.5	35.4	35.1	35.3	36.5	36.2
7571	33.9	34.7	34.9	33.3	33.8	34.3	35.0	35.6
7561	33.1	34.7	34.3	34.9	36.9	35.3	35.5	35.8
7564	33.5	34.3	34.6	33.7	36.9	34.5		
7574	34.9	34.7	34.7	34.0	36.2	35.2		
7556	34.7	34.6	34.5	34.2	35.2	34.8		
7572	34.0	34.6	34.3	33.7	34.0	34.2	• •	
MEAN	34.2	34.7	34.9	34.2	35.7	34.9	35.7	35.9
SD	0.63	0.33	0.60	0.69	1.39		0.62	0.28
N	8	8	8	8	8	8	4	4
CDOUD. /F.	6.0 mg base/							
7539	The second secon	34.2	35.1	33.0	33.6	34.8	35.0	35.1
7563		35.6	35.3	34.4	34.9			
7540	35.2	35.8	35.0	34.7	34.8	35.4		
7554	33.8	34.2	34.2	33.0	35.0	33.0	33.1	35.2
7568	35.2	35.0	35.1	34.4	36.8	34.8		33.6
7544	34.7	34.4	35.6	34.7	36.3	35.6	••	••
7546	33.7	35.7	34.4	32.5	34.4	33.9	••	
7551	33.8	34.2	35.3	33.9	33.6	34.5		
	34.4	34.9	35.0	33.8	34.9	34.7	34.6	35.5
MFAN								
MEAN SD	0.68	0.72	0.47	0.87	1.15	0.89	1.00	0.55



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Reticulocytes (%RBCs)

STUDY ID: 097 SEX: FEMALE STUDY NO: 097 ABBR: RETICS UNITS: % RBCs ANIMAL ID Week -3 Week -1 Week 2 Week 4 Week 8 Week 13 Week 18 Week 26 GROUP: 1F:0 mg base/kg/day 0.3 0.1 0.2 0.2 0.1 0.4 0.4 0.6 0.21 0.14 0.19 0.15 0.11 0.18 0.29 0.19 8 8 8 8 8 8 8 4 4 MEAN SD GROUP: 2F:0.1 mg base/kg/day 0.2 0.5 0.0 0.2 0.3 0.2 0.3 MEAN 0.4 0.38 SD

(--)-Data Unavailable

N



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Reticulocytes (%RBCs)

STUDY ID: 097 STUDY NO: 097 ABBR: RETICS SEX: FEMALE

UNITS: % RBCs

ADDIC. KEI	100							OHITO: A REC
ANIMAL ID	Week -3	Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26
GROUP: 3F	:2.0 mg base/	kg/day						
7562	0.5	0.0	0.5	1.3	0.3	0.4	0.6	0.1
7548	0.1	0.1	0.0	0.6	0.7	0.0	0.2	0.2
7571	0.0	0.1	0.1	1.0	0.5	0.7	0.1	0.0
7561	0.0	0.1	0.7	1.0	1.3	0.7	1.0	0.5
7564	0.6	0.0	0.3	0.5	0.5	0.8		
7574	0.3	0.0	0.3	0.8	0.5	0.1		
7556	0.0	0.1	0.1	0.2	1.5	0.8		
7572	0.1	0.1	0.3	0.4	0.9	1.0		
1EAN	0.2	0.1	0.3	0.7	0.8	0.6	0.5	0.2
SD	0.24	0.05	0.23	0.37	0.43	0.36	0.41	0.22
N	8	8	8	8	8	8	4	4
	:6.0 mg base/	Professional Action of the Control o	0.0	4.0		4.0	0.0	0.4
7539	0.3	0.0	0.0	1.0	1.1	1.0	0.0	0.1
7563	0.5	0.3	1.0	0.0	0.8	1.7	0.5	0.1
540	0.3	0.5	0.5	0.9	1.0	0.8	0.7	0.2
7554	0.1	0.2	0.8	0.4	1.4	1.5	1.1	0.2
7568	0.4	0.0	0.5	1.2	0.9	1.5		
7544	0.4	0.1	0.2	1.0	1.0	1.5		
7546	0.9	0.2	1.2	0.9	0.0	1.0		
7551	0.1	0.0	0.1	0.3	0.9	1.6	• •	**
EAN	0.4	0.2	0.5	0.7	0.9	1.3	0.6	0.2
MEAN SD	0.4 0.25	0.2 0.18	0.5 0.43	0.7 0.42	0.9	1.3 0.34		

DRAFT

1

0

1

4

1.3

-1

0

--

0

0.5

THIRTEEN WEEK ORAL TOXICITY STUDY OF WR 238605 WITH A THIRTEEN WEEK RECOVERY PERIOD IN DOGS

INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Nucleated Red Cells

STUDY ID: 097 STUDY NO: 097 ABBR: NRBC UNITS: COUNT ANIMAL ID Week -3 Week -1 Week 2 Week 4 Week 8 Week 13 Week 18 Week 26 GROUP: 1F:0 mg base/kg/day 1F:0 mg base/kg/day
0 0 0
0 0
0 0 0
0 0 0
0 0 0
0 0 0
0 0 0
0 0 0
0 0 0
0 0 0 7557 0 2 0 0 0 0 1 0 0 0 0 0 0 0 7541 2 0 0 7566 1 0 1 1 3 2 1 0 7549 7555 7558 7573 7542 0 0 0 0 0 0 1 0.0 0.4 0.0 0.4 0.7 0.9 8 8 8 8 8 8 MEAN SD 0.6 0.0 4 GROUP: 2F:0.1 mg base/kg/day 0 0 0 0 0 2F:0.1 mg base/kg/day
0 0 0
0 0 0
0 0 0
0 0 0
1 0 0
0 0 0
0 0 0 3 0 0 0 0 0 0 0 1 0 2 0 0 0 0 0 0 0 0 0 0 7543 7553 1 0

0

8

0

8

0.0

(--)-Data Unavailable

0

8

0

8

7545

7552

7569

7560 7567 7550

MEAN

SO

N

WBC corrected for NRBC = or > 10

0

8

0 0 1.1 0.7

0

0.4

8

THIRTEEN WEEK ORAL TOXICITY STUDY OF WR 238605 WITH A THIRTEEN WEEK RECOVERY PERIOD IN DOGS

INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Nucleated Red Cells

						A. (A. 14)		
STUDY ID: STUDY NO:								SEX: FEMAL
ABBR: NRB								UNITS: COUN
ANIMAL ID	Week -3	Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26
GROUP: 3F:	2.0 mg base/	kg/day						
7562	0	0	0	0	0	0	0	2
7548	1	0	0	0	0	0	0	1
7571	0	0	4	3	0	0	0	0
7561	0	0	0	1	0	0	0	0
7564	0	0	0	4	3	0		
7574	D	0	0	1	1	0		
7556	1	2	0	3	0	1	• •	
7572	0	0	0	4	1	0	••	
MEAN	0	0	1	2	1	0	0	1
SD	0.5	0.7	1.4	1.7	1.1	0.4	0.0	1.0
N	8	8	8	8	8	8	4	4
GROUP - AF.	6.0 mg base/l	ro/day		• • • • • • • • • • • • • • • • • • • •			• • • • • • • • • • • • • • • • • • • •	
7539	0	0	0	1	0	0	0	0
7563	0	Ō	0	ò	0	2	0	0
7540	0	0	2	7	2	2	0	0
7554	1	0	ō	7	1	5	1	D
7568	1	0	3	5	0	0		
7544	0	0	1	0	3	0		
7546	Ō	0	1	10	5	0		
7551	0	0	2	6	0	8		
MEAN	0	0	1	5	1	2	0	0
SD	0.5	0.0	1.1	3.7	1.8	2.9	0.5	0.0
N	8	8	8	8	8	8	4	4

.....

(--)-Data Unavailable

INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Heinz Bodies

STUDY ID: 097

STUDY NO: 097

UNITS: %

ABBR: HB								UNITS: %
ANIMAL ID	Week -3	Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26
GROUP: 1F:	0 mg base/kg	/day						
7557	0.2	0.0	0.0	0.0	0.2	0.3	0.0	0.0
7541	0.9	0.0	0.0	0.1	0.1	0.1	0.1	0.0
7566	0.0	0.0	0.0	0.0	0.4	0.2	0.0	0.0
7549	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.0
7555	0.2	0.0	0.0	0.0	0.0	0.0		
7558	0.1	0.1	0.0	0.0	0.0	0.2		
7573	0.0	0.0	0.0	0.0	0.0	0.2	• •	
7542	0.2	0.1	0.0	0.2	0.0	0.0		
MEAN	0.2	0.0	0.0	0.0	0.1	0.1	0.1	0.0
SD	0.29	0.05	0.00	0.07	0.15	0.12	0.06	0.00
N	8	8	8	8	8	8	4	4
CPOID 25	0.1 mg base/	'ka/day						
7543	0.5		0.0	0.0	0.1	0.1	0.2	0.0
7553	0.5	0.0	0.0	0.0	0.3	0.5		0.0
7545	0.2	0.0	0.4	0.0	0.0	0.1	0.0	0.0
7552	0.2	0.0	0.0	0.0	0.1	0.8	0.0	0.2
7569	0.0	0.3	0.1	0.0	0.2	0.3		•••
7560	0.1	0.1	0.0	0.0	0.0	0.2		
7567	0.0	0.0	0.0	0.0	0.0	0.0	**	••
7550	0.2	0.1	0.0	0.0	0.2	0.1		**
1330	V.L	V. 1	•••	0.0	0.5	011		
MEAN	0.2	0.1	0.1	0.0	0.1	0.3	0.1	0.1
SD	0.20	0.11	0.14	0.00	0.11	0.27	0.10	0.10
N	8	8	8	8	8	8	4	4



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Heinz Bodies

STUDY ID: 097
SEX: FEMALE
STUDY NO: 097
ABBR: HB UNITS: %

MODE. IID								ONTIO.	~
ANIMAL ID	Week -3	Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26	
GROUP: 3F	2.0 mg base/	'kg/day							
7562	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	
7548	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7571	0.0	0.1	0.0	0.0	0.0	0.6	0.0	0.1	
7561	0.1	0.0	0.0	0.0	0.0	0.3	0.0	0.0	
7564	0.2	0.0	0.0	0.1	0.4	0.2			
7574	0.0	0.1	0.0	0.0	0.1	0.1			
7556	0.0	0.0	0.0	0.0	0.0	0.0			
7572	0.0	0.1	0.0	0.0	0.8	0.0			
MEAN	0.1	0.0	0.0	0.0	0.2	0.2	0.0	0.0	
SD	0.11	0.05	0.00	0.05	0.29	0.21	0.00	0.05	
N	8	8	8	8	8	8	4	4	
				• • • • • • • • • • • • • • • • • • • •					
	6.0 mg base/		0.0	0.0		0.5	0.0	0.0	
7539	0.2	0.0	0.0	0.0	0.1	0.5	0.0	0.0	
7563	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	
7540	0.1	0.0	0.3	0.1	0.0	0.0	0.0	0.0	
7554	0.0	0.0	0.5	0.0	0.1	0.0	0.0	0.0	
7568	0.0	0.0	0.0	0.0	0.1	0.4			
7544	0.3	0.0	0.0	0.2	0.1	0.0		~ *	
7546	0.4	0.0	0.0	0.0	0.0	0.0			
7551	0.2	0.1	0.0	0.0	0.1	0.0	• •		
MEAN	0.2	0.0	0.1	0.0	0.1	0.2	0.0	0.0	
SD	0.15	0.04	0.19	0.07	0.05	0.31	0.00	0.00	
N	8	8	8	8	8	8	4	4	



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: % Methemoglobin

STUDY ID: 097 SEX: FEMALE

STUDY NO: 097

ABBR: %MET	HGB							UNITS:
ANIMAL IO	Week -3	Week -1	Week 2	Week 4	Week 8			Week 26
GROUP: 1F:	0 mg base/kg	a/day						
7557	1.4	1.2	0.8	0.9	0.9	0.8	0.5	0.7
7541	1.6	1.3	0.8	0.8	0.8	1.0	0.6	0.8
7566	2.1	1.4	1.3	1.3	0.9	0.9	1.2	1.2
7549	1.0	0.9	0.8	0.7	0.7	0.8	0.6	0.9
7555	1.5	1.2	0.8	0.8	0.8	0.7		
7558	1.9	0.9	1.0	0.8	0.9	0.7		
7573	3.4	3.2	1.9	1.5	0.8	1.3		
7542	1.5	0.8	0.9	2.0	0.7	0.9	••	
MEAN	1.8	1.4	1.0	1.1	0.8	0.9	0.7	0.9
SD	0.73	0.77	0.39	0.46	0.08	0.20	0.32	0.22
N	8	8	8	8	8	8	4	4
GROUP: 2F:	0.1 mg base/	/kg/day						
7543	2.0		1.2	0.8	0.8	1.1	0.7	0.9
7553	3.3	2.7	2.7	1.0	1.0	3.6	0.5	1.1
7545	0.9	0.9	0.7	0.8	1.2	1.1	0.9	0.9
7552	1.7	1.1	0.9	1.0	0.8	0.8	0.8	0.9
7569	1.1	1.0	1.1	1.0	0.8	0.9		
7560	2.0	1.0	1.1	1.1	1.1	0.9		
7567	4.3	4.4	2.3	1.4	1.4	3.6		
7550	1.1	1.0	1.0	1.2	1.4	1.3		
MEAN	2.1	1.7	1.4	1.0	1.1	1.7	0.7	1.0
SD	1.19	1.24	0.72	0.20	0.26	1.21	0.17	0.10
N	8	8	8	8	8	8	4	4



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: % Methemoglobin

STUDY ID: 097 STUDY NO: 097

SEX: FEMALE

ANIMAL ID	Week -3	Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26
	2.0 mg base/		9.0	17 1	42.4	12.0	4.4	0.0
7562	1.5	0.00 (0)		13.1				0.9
7548	4.0	2.6	13.6	17.4	12.4	(7)	0.0	2
7571	0.9	0.9	15.2	17.8		0 100000		0.00
7561	3.9	2.6	15.6	14.5	12.5	E 10.5070	000.000	1.1
7564	1.5	1-0	13.5	18.0	16.3	15-5		
574	1.8	1.4	13.4	13.5	12.2	12.5		
556	1.1	(0)(0)(0)		9.5	8.2			
572	1.1	0.9	12.7	13.6	11-9	11.8		
EAN	2.0	1.4	11.7	14.7	12.5	12.9	1.0	1.0
SD	1.25	0.78	4.82	2.93	2.29	2.47	0.22	0.10
N	8	8	8	8	8	8	4	4
ROUP: 4F:	6.0 mg base/	kg/day		•••••				
539	1.6	Marie Control of the	18.9	18.2	20.9	23.8	6.8	1.0
563	1.5	1.2	29.3	24.6	26.3	25.9	2.1	1.2
540	1.0	0.7	29.3	26.7	29.7	33.1	4.2	1.2
554	2.0	1.5	13.4	16.0	16.1	15.5	3.7	0.9
568	1.2	0.9	17.7	19.3	21.3	21.1		
544	1.6	1.0	30.3	30.6	26.3	27.9		
546	0.7	0.6	27.8	22.6	22.2	12000 000		
551	1.2	0.8	25.1	24.7	25.7			
EAN	1.4	1.1	24.0	22.8	23.6	24.8	4.2	1.1
SD	0.41	0.41	6.43	4.82	4.26	17700 D TH		0.15
		V . T I	WOTE	7000	T 0 10 W	2017	1072	V . I .



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Platelets

STUDY NO: 097

ABBR: P	LT							UNITS: 10 ³ /ccm
ANIMAL I	ID Week -3	Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26
GROUP: 1	F:0 mg base/kg	/day						
7557	378	323	291	274	286	294	363	248
7541	367	164	334	257	288	278	325	300
7566	285	277	255	237	244	249	260	301
7549	314	285	235	251	247	248	322	295
7555	418	392	306	358	291	317		
7558	453	389	192	357	294	325		••
7573	215	326	213	365	353	346		
7542	537	378	334	279	291	365		
MEAN	371	317	270	297	287	303	318	286
SD	101.1	76.2	54.4	53.6	33.6	43.1	42.6	25.5
N	8	8	8	8	8	8	4	4
GROUP: 2	F:0.1 mg base/	kg/dav						• • • • • • • • • • • • • • • • • • • •
7543	326	320	253	347	294	277	310	211
7553	437	434	276	259	260	325	409	574
7545	175	159	212	155	206	231	240	231
7552	424	336	347	296	303	237	406	363
7569	260	142	234	198	282	299		• •
7560	384	280	275	230	200	197		
7567	411	459	366	291	235	291		
7550	448	338	246	258	284	258		
MEAN .	358	309	276	254	258	264	341	345
SD	97.3	114.0	54.0	60.2	40.0	41.7	81.7	167.0
N	8	8	8	8	8	8	4	4



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Platelets

STUDY ID: 097

SEX: FEMALE
STUDY NO: 097

STUDY NO:	097							
ABBR: PLT								UNITS: 10^3/ccm
ANIMAL ID	Week -3	Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26
GROUP: 3F:2	2.0 mg base/	kg/day						
7562	257	362	139	98	70	150	365	339
7548	362	282	178	156	229	280	318	243
7571	245	261	106	89	134	162	326	282
7561	470	412	276	200	337	362	479	418
7564	369	325	106	157	309	372	***	
7574	359	329	106	143	154	204		
7556	352	316	199	102	293	310		
7572	351	373	129	77	151	252		**
MEAN	346	333	155	128	210	262	372	321
SD	70.2	49.0	60.0	42.6	96.5	85.1	74.2	76.0
N	8	8	8	8	8	8	4	4
GROUP: 4F:6	5.0 mg base/	kg/dav						
7539	329	320	84	68	153	285	247	229
7563	326	215	129	291	262	287	184	247
7540	556	452	78	150	314	391	334	429
7554	474	319	131	171	159	171	176	275
7568	318	292	82	110	143	256	**	
7544	444	424	82	288	338	371		
7546	379	347	42	68	291	125		
7551	343	324	45	75	44	68		
MEAN -	396	337	84	153	213	244	235	295
SD	86.7	74.2	32.9	92.6	103.0	114.6	73.1	91.3
N	8	8	8	8	8	8	4	4



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Prothrombin Time

STUDY ID: 097

SEX: FEMALE

STUDY NO: 097 ABBR: PT

UNITS: sec

	Week -3	Week -1	Week 2		Week 8		Week 18	Week 26
	0 mg base/kg							
7557	7.0	7.4	7.5	7.0	7.0	7.2	7.3	7.0
7541	7.2	7.0	7.3	7.1	7.2	7.2	7.2	7.4
7566	7.4	7.3	7.6	7.3	7.3	7.4	7-4	7.6
7549	7.3	7.5	7.6	7.4	7.9	7.6	7.4	7.6
7555	7.0	7.3	7.0	7.1	7.1	7.2		w w
7558	7.3	7.3	7.2	7.2	7.1	7.1		
7573	7.1	7.3	7.0	7.2	7.0	6.9		
7542	7.4	7.3	7.5	7.5	7.2	7.4		
MEAN	7.2	7.3	7.3	7.2	7.2	7.3	7.3	7.4
SD	0.16	0.14	0.25	0.17	0.29	0.21	0.10	0.28
N	8	8	8	8	8	8	4	4
GROUP: 2F:	0.1 mg base/	'ka/dav						
7543	7.2	7.7	7.6	7.5	7.5	7.5	7.6	7.4
7553	7.2	7.1	7.3	7.1	7.1	7.2	7.0	7.4
7545	7.2	7.1	7.4	7.2	7.3	7.3	7.4	7.5
7552	6.9	7.1	7.2	7.0	7.9	7.0	7.0	7.3
7569	7.2	7.0	7.3	7.1	6.9	7.1		**
7560	7.6	7.4	7.9	7.4	7.7	7.7		
7567	7.2	7.4	7.2	7.3	7.1	7.5	• •	
7550	7.4	7.3	7.5	7.4	7.2	7.1	••	••
MEAN	7.2	7.3	7.4	7.3	7.3	7.3	7.3	7.4
SD -	0.20	0.23	0.24	0.18	0.34	0.24	0.30	0.08



7.5 0.25

7.3 0.13

4

8

THIRTEEN WEEK ORAL TOXICITY STUDY OF WR 238605 WITH A THIRTEEN WEEK RECOVERY PERIOD IN DOGS

INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Prothrombin Time

STUDY ID: 097 STUDY NO: 097 UNITS: sec ABBR: PT ANIMAL ID Week -3 Week -1 Week 2 Week 4 Week 8 Week 13 Week 18 Week 26 GROUP: 3F:2.0 mg base/kg/day

 mg base/kg/day

 6.8
 7.3
 7.3
 6.9
 7.1
 7.2

 7.3
 7.4
 7.2
 7.0
 7.1
 7.0

 7.1
 7.3
 7.2
 6.8
 7.1
 7.0

 7.2
 7.0
 7.1
 6.8
 7.3
 6.9

 7.4
 7.5
 7.4
 6.9
 7.6
 7.4

 7.2
 7.4
 7.0
 6.8
 7.1
 7.0

 7.1
 7.7
 7.6
 7.0
 6.8
 6.9

 7.2
 7.3
 7.1
 6.8
 7.1
 7.0

 6.8 7.1 7562 7.4 7548 7.2 7571 7.3 7.3 6.9 7561 7.5 7564 7574 7556 7572 7.1 0.17 0.22 8 4 7.2 7.4 7.2 6.9 0.18 0.20 0.19 0.09 8 8 8 8 7.2 0.23 8 7.4 MEAN SD 0.15 GROUP: 4F:6.0 mg base/kg/day
7539 7.1 7.5 6.9 6.8 7.5 7.0
7563 7.4 7.4 7.4 7.2 7.3 7.4
7540 7.1 7.0 6.9 6.7 7.5 6.9
7554 7.5 7.5 7.4 7.0 7.0 6.9
7568 7.1 7.2 7.0 6.8 7.1 7.0
7544 7.3 7.3 7.3 7.2 7.1 7.3 7.4
7546 7.2 7.2 7.2 7.2 6.9 7.0 7.1
7551 7.0 7.5 7.1 6.7 7.6 7.1 ______ 7.0 7.3 7.4 7.4 7.4 7.1 7.2 7.3 ------

7.2 7.3 7.1 6.9 7.3 7.1 0.17 0.18 0.20 0.19 0.24 0.20 8 8 8 8 8 8 8

(--)-Data Unavailable

MEAN

SD

N

0.17 8

8



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Act. Partial Thrombo. Time

STUDY ID: 097 SEX: FEMALE STUDY NO: 097

ANIMAL ID	Uook -3	Week -1	Ueek 2	Week 4	Week 8	Week 13	Week 18	Week 26
		week - I				week 13	week 10	WEEK 20
GROUP: 1F:	0 mg base/kg	/day						
7557	12.1	10.9	10.3	10.3	10.0	10.5	10.1	10.6
7541	11.5	13.3	11.1	10.4	10.4	10.6	10.2	10.9
7566	11.2	11.8	10.6	10.6	10.3	10.5	10.5	10.3
7549	11.5	11.3	10.7	10.8	10.5	10.4	10.2	11.0
7555	12.6	11.9	11.1	10.4	10.7	11.1	• •	
7558	12.8	13.2	12.9	11.7	11.5	11.6		
7573	12.6	12.2	12.5	12.4	11.2	11.4		
7542	12.0	12.6	11.6	11.5	10.7	10.4		
MEAN	12.0	12.2	11.4	11.0	10.7	10.8	10.3	10.7
SD	0.60	0.85	0.93	0.77	0.49	0.48	0.17	0.32
N	8	8	8	8	8	8		4
GROUP: 2F:	0.1 mg base/							
7543	10.9	10.4	10.1	10.1	10.1	10.1	10.2	10.2
7553		11_7	10.9	10.8	11.2	10.9	10.6	11.0
7545	12.2	11.7	11.7	11.4	11.0	11.6	10.8	11.3
7552	11.4	11.3	10.7	10.9	11.3	11.0	11.1	11.3
7569	12.0	12.5	12.3	10.6	11.0	10.4		
7560	12.7	12.9	10.7	10.5	10.5	10.8		
7567	12.8	12.6	11.9	10.9	11.6	10.7		
7550	11.8	11.6	10.9	10.3	10.8	12.3	**	
MEAN	11.9	11.8	11.2	10.7	10.9	11.0	10.7	11.0
SD .	0.64	0.81	0.74	0.41	0.47	0.69	0.38	0.52
N	8	8	8	8	8	8	4	4



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Act. Partial Thrombo. Time

STUDY ID: 097
SEX: FEMALE
STUDY NO: 097
ABBR: APTT
UNITS: sec

ABBR: APT	Т							UNITS: sec
ANIMAL ID	Week -3	Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26
GROUP: 3F	:2.0 mg base/	kg/day						
7562	12.1	10.8	10.7	10.3	9.7	10.5	10.2	10.4
7548	10.8	11.0	10.4	10.2	10.2	10.7	10.3	11.0
7571	11.8	12.1	10.9	11.5	10.8	10.9	11.1	11.5
7561	11.2	10.8	9.9	10.3	9.5	10.0	10.5	9.9
7564	11.6	11.9	11.3	11.7	10.8	11.1		
7574	11.6	11.0	11.4	11.0	10.4	10.8		
7556	12.7	12.0	11.6	11.7	11.2	11.5		
7572	11.1	11.6	10.6	9.9	10.2	10.3		• •
MEAN	11.6	11.4	10.9	10.8	10.4	10.7	10.5	10.7
SD	0.60	0.56	0.57	0.74	0.58	0.47	0.40	0.70
N	8	8	8	8				
GROUP: 4F	:6.0 mg base/	kg/day						
7539		11.7	12.5	10.9	10.3	10.1	10.3	10.8
7563	11.2	12.2	10.4	10.7	10.1	10.7	10.1	10.6
7540	12.7	12.2	11.5	11.7	11.7	11.3	11.8	12.3
7554	12.2	13.1	11.8	12.1	11.0	14.5	12.5	11.8
7568	11.9	12.2	11.3	12.2	11.6	11.6		
7544	11.5	11.1	11.0	12.5	10.9	10.9		
7546	11.5	10.9	10.5	11.6	10.7	10.5		* *
7551	11.9	12.7	10.9	11.9	10.4	9.0	• •	
MEAN	11.9	12.0	11.2	11.7	10.8	11.1	11.2	11.4
SD .	0.54	0.75	0.70	0.63	0.59	1.60	1.16	0.81
N	8	8	8	8	8	8	4	4

/ - 2 Date Henrichland



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Leukocytes

STUDY ID: 097

STUDY NO: 097 ABBR: WBC UNITS: 10^3/cmm

ANIMAL ID	Week -3	Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26
GROUP: 1F:	0 mg base/kg	/day						
7557	8.6	6.8	8.3	8.8	8.2	7.0	7.4	9.0
7541	6.8	7.1	7.9	6.5	7.1	7.1	6.0	7.0
7566	7.9	13.2	7.4	9.3	8.4	8.7	7.1	9.0
7549	10.6	6.6	5.8	5.6	6.3	6.9	4.9	6.1
7555	6.6	8.9	9.2	5.6	6.7	6.1		
7558	7.6	6.9	9.8	7.5	7.0	8.2		
7573	7.3	9.1	15.3	7.5	8.5	10.7		
7542	10.4	11.1	12.6	9.8	8.6	12.8	••	
MEAN	8.2	8.7	9.5	7.6	7.6	8.4	6.4	7.8
SD	1.54	2.39	3.06	1.62	0.92	2.27	1.14	1.46
N	8	8	8	8	8	8	4	4
GROUP: 2F:	0.1 mg base/	kg/day						
7543	METALON AND DESCRIPTION OF THE PARTY OF THE	8.6	10.7	13.2	10.0	11.1	9.8	9.0
7553	8.6	9.0	6.7	5.9	6.7	6.4	7.3	12.4
7545	6.7	10.0	10.5	7.5	7.0	8.4	5.9	6.3
7552	9.6	9.6	11.6	8.6	8.8	7.0	11.4	10.2
7569	6.5	6.3	6.8	7.5	8.7	6.7		• •
7560	9.6	13.4	10.3	7.3	7.2	7.4		
7567	8.6	9.4	8.6	7.2	6.6	8.4		
7550	8.6	12.9	10.8	9.8	14.3	9.3		
MEAN	8.4	9.9	9.5	8.4	8.7	8.1	8.6	9.5
SD	1.21	2.30	1.89	2.25	2.58	1.57	2.47	2.54
N	8	8	8	8	8	8	4	4

(--)-Data Unavailable



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Leukocytes

STUDY ID: 097 STUDY NO: 097 ABBR: WBC SEX: FEMALE

UNITS: 10^3/cmm

ABBR: WBC								UNITS: 10^3/cmm
ANIMAL ID	Week -3	Week -1		Week 4				Week 26
CDONED - 3E	2.0 mg base/	'ka/day						
7562	7.1	6.8	5.6	7.2	6.4	7.5	6.7	6.5
7548	7.6	7.0	10.7	9.0	9.2	10.4	7.8	12.9
7571	5.9	7.3	6.8	5.9	10.6	12.3	9.3	6.1
7561	10.2	10.3	9.5	11.0	11.3			9.9
7564	6.8	8.9	6.6	9.2	9.0	7.2		
7574	6.5	8.2	8.9	13.0	13.8	19.5		
7556	11.6	8.7	7.3	8.5	13.6	12.4		
7572	6.5	13.0	8.9	8.1	8.4	10.0		
MEAN	7.8	8.8	8.0	9.0	10.3	11.2	8.9	8.9
SD		2.06						.—
N	8	8	8	8	8		4	4
0001D / F								
	6.0 mg base/		44.2	4.0	0 /	42.5		7.0
7539	6.6	7.4	11.2			12.5	77.	7.8
7563	9.2	12.9	11.0	8.1		9.6	29X G P	8.5
7540	7.3	10.0	6.3	9.4	8.2	12.6	7.1	9.3
7554	9.5	9.6	8.6	7.5	17.9	25.2	21.9	10.5
7568	7.3	6.6	6.9	8.2	7.6	10.4	• •	
7544	9.1	13.9	7.3	10.2	12.7	13.0		
7546	10.3	10.1	7.6	8.5	11.2	17.8		
7551	8.5	8.2	8.7	7.9	7.5	7.6		• •
MEAN	8.5	9.8	8.5	8.3	10.2	13.6	10.6	9.0
SD	1.29	2.54	1.82	1.05	3.62	5.57	7.60	1.16
N	8	8	8	8	8	8	4	4

(--)-Data Unavailable WBC corrected for NRBC = or > 10



SEX: FEMALE

THIRTEEN WEEK ORAL TOXICITY STUDY OF WR 238605 WITH A THIRTEEN WEEK RECOVERY PERIOD IN DOGS

INDIVIDUAL ANIMAL REPORT BY GROUP TEST: M. Neutrophils

STUDY ID: 097
STUDY NO: 097

ANIMAL ID	Week -3	Week -1		Week 4				Week 26
GROUP: 1F:	0 mg base/kg	/dav						
7557	4.4	3.9	5.0	5.1	4.8	3.9	2.9	5.4
7541	4.6	5.0	5.3	4.2	4.8	5.3	4.3	5.1
7566	4.3	9.1	3.8	6.0	5.1	4.4	3.3	5.2
7549	7.4	4.5	3.3	3.4	3.8	4.8	2.7	3.5
7555	4.2	7.5	6.6	3.5	4.5	3.4		
7558	5.4	4.6	7.0	4.7	4.2	5.1		144.64
7573	4.4	5.9	11.5	4.3	5.4	7.2		
7542	5.1	5.8	8.3	5.1	4.6	7.9		-
MEAN	5.0	5.8	6.4	4.5	4.7	5.3	3.3	4.8
SD	1.06	1.74		0.87				0.88
N	8	8	8	8	8	8	4	4
GROUP 2F.	0.1 mg base/	/kg/day						
7543	5.0		6.4	9.4	5.1	6.5	5.8	6.5
7553	4.8	5.0	4.0	2.8	3.6	3.9	4.2	8.1
7545	4.4	6.2	8.1	4.7	4.3	5.3	2.8	3.2
7552	6.6	6.0	8.0	5.0	5.2	4.1	8.3	7.0
7569	3.1	3.4	3.7	5.3	5.2	4.8	••	
7560	4.8	8.3	5.3	3.1	2.9	4.3		
7567	4.9	6.4	4.4	3.9	3.6	3.4	••	
7550	5.6	9.3	7.5	5.5	9.3	5.3	**	
MEAN	4.9	6.3	5.9	5.0	4.9	4.7	5.3	6.2
SD	0.99	1.84	1.82	2.05	1.98	0.99	2.36	2.11
N	8	8	8	8	8	8	4	4

(--)-Data Unavailable

DRAFT

THIRTEEN WEEK ORAL TOXICITY STUDY OF WR 238605 WITH A THIRTEEN WEEK RECOVERY PERIOD IN DOGS

INDIVIDUAL ANIMAL REPORT BY GROUP TEST: M. Neutrophils

STUDY ID: 097

SEX: FEMALE
STUDY NO: 097

ABBR: M. Neutrop

UNITS: 10^3/cmm

ABBR: M. N								UNITS: 10^3/cmm
		Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26
CPOLID. 3F.	2.0 mg base/	/ka/day		~===				~~~~~~~
7562	5.1	4.0	3.1	4.0	3.8	5.1	3.6	3.9
7548	3.7	3.0	6.6	5.3	7.0	7.2	5.2	8.5
7571	2.8	4.2	4.4	3.2	7.1	10.1	6.1	3.8
7561	6.1	4.7	5.1	6.7	7.1	7.3	8.7	6.6
7564	3.8	5.4	3.5	5.5	5.9	4.3		
7574	2.5	4.0	5.1	8.2	11.6	14.6		
7556	6.4	4.3	4.4	4.9	8.8	9.3		
7572	3.8	10.0	6.4	5.4	4.0	6.5	••	
MEAN	4.3	5.0	4.8	5.4	6.0	8.1	5.9	5.7
SD	GO TOTAL	2.15			2 2 2		2.13	
N	8	8	8	8	8	8	4	4
CROWN / F	· · · · · · · · · · · · · · · · · · ·							
	6.0 mg base/	4.8	9.1	3.2	6.1		7 7	, ,
7539 7563	3.0 6.3	10.6	7.4	5.5	6.2	8.0 6.5	3.7 5.8	
7540	4.1	6.6	2.9	6.9	5.0	8.8	4.0	5.8 6.1
7554	4.6	4.7	5.2	4.0	15.0	14.1	13.4	5.0
			3.9	4.6			13.4	5.0
7568	3.5	3.9	40 100		4.1	7.7		
7544	5.8	10.0	4.1	6.9	9.4	10.1		
7546	6.3	7.5	4.5	6.0	7.5	12.6		
7551	5.3	5.9	5.9	5.5	4.3	4.8		**
MEAN	4.9	6.8	5.4	5.3	7.2	9.1	6.7	5.3
SD	1.26	2.47	2.03	1.32	3.60	3.09	4.55	0.77
N	8	8	8	8	8	8	4	4

(--)-Data Unavailable



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: I. Neutrophils

STUDY 10: 097
SEX: FEMALE
STUDY NO: 097

ABBR: I. Neutrop

UNITS: 10³/cmm

ABBR: I. N	leutrop							UNIIS: 10^3/cmr
ANIMAL IO	Week -3	Week -1						Week 26
GROUP: 1F-	0 mg base/kg							
7557	3.6	0.1	0.0	0.0	0.2	0.1	0.2	0.1
7541	0.0	0.1	0.2	0.2	0.1	0.0	0.1	0.0
7566	0.2	0.3	0.3	0.1	0.3		0.1	0.0
7549	0.0	0.1	0.2	0.0	0.3	0.1	0.2	0.0
7555	0.1	0.1	0.2	0.0	0.2	0.1		
7558	0.0	0.0	0.2	0.3	- 0.1	0.0		
7573	0.1	0.3	0.5	0.5	0.0	0.0	• •	
7542	0.0	0.0	0.1	0.4	0.2	0.3		
MEAN	0.5	0.1	0.2	0.2	0.2	0.1	0.2	0.0
SD	1.25	0.12			0.10			
N	8	8	8	8	8	8	4	4
CPOID- 2E-	0.1 mg base/	ka/day						
7543	0.0	0.3	0.1	0.0	0.2	0.3	0.2	0.2
7553	0.0	0.0	0.1	0.0	0.1	0.4	0.4	0.6
7545	0.0	0.0	0.1	0.3	0.0	0.5	0.1	0.0
7552	0.0	0.0	0.6	0.9	0.2	0.3	0.0	0.3
7569	0.1	0.1	0.1	0.3	0.3	0.1		
7560	0.2	0.1	0.2	0.1	0.1	0.1		
7567	0.2	0.2	0.2	0.4	0.1	0.2		
7550	0.0	0.3	0.1	0.3	0.4	0.6	••	• •
MEAN	0.1	0.1	0.2	0.3	0.2	0.3	0.2	0.3
SO	0.09	0.13	0.17	0.29	0.13	0.18	0.17	0.25
N	8	8	8	8	8	8	4	4

(--)-Data Unavailable

INDIVIDUAL ANIMAL REPORT BY GROUP TEST: I. Neutrophils

STUDY ID: 097
SEX: FEMALE
STUDY NO: 097

UNITS: 10³/cmm ABBR: I. Neutrop ANIMAL ID Week -3 Week -1 Week 2 Week 4 Week 8 Week 13 Week 18 Week 26 ------GROUP: 3F:2.0 mg base/kg/day 7562 0.1 0.1 0.1 0.2 0.5 0.2 0.1 0.2 0.6
7571 0.0 0.1 0.4 0.7 1.0 0.7 0.6 0.5 0.2
7564 0.1 0.4 0.2 0.5 0.4 0.1 -- -7574 0.1 0.2 0.4 0.5 0.4 0.1 -- -7575 0.2 0.1 0.2 0.4 0.5 0.4 0.1 -- -7576 0.2 0.1 0.3 0.1 0.3 0.1 1.6 0.2 -- -7577 0.0 0.3 0.1 0.3 0.1 0.3 0.6 0.6 -- --
 0.1
 0.2
 0.3
 0.5
 0.6
 0.4
 0.3
 0.2

 0.06
 0.14
 0.20
 0.27
 0.47
 0.40
 0.17
 0.26

 8
 8
 8
 8
 8
 8
 4
 4
 MEAN SO GROUP: 4F:6.0 mg base/kg/day 0.3 7563 0.1 7540 0.3 0.2 7554 7568 --7544 7546 7551
 0.1
 0.1
 0.5
 0.5
 0.3
 0.9
 0.8
 0.2

 0.07
 0.13
 0.43
 0.23
 0.15
 1.46
 1.22
 0.10

 8
 8
 8
 8
 8
 8
 4
 4
 MEAN SD

(--)-Data Unavailable



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Lymphocytes

STUDY ID: 097
STUDY NO: 097
ABBR: Lymphocyte
UNITS: 10^3/cmm

ABBR: Lymp	onocyte							UNITS: 10^3/cmm
ANIMAL ID	Week -3	Week -1		Week 4				Week 26
GROUP: 1F:	0 mg base/kg	ı/day						
7557	0.1		2.8	3.2	3.0	2.6	3.8	3.2
7541	2.0	1.8	2.0	1.6	1.8	1.5	1.4	1.4
7566	2.4	2.5	2.2	2.0	2.1	3.0	3.5	2.4
7549	2.3	1.6	2.0	2.0	2.1	1.7	1.5	2.3
7555	1.8	1.0	1.7	2.0	1.6	1.9		
7558	1.6	2.1	1.7	1.8	2.5	2.3		
7573	2.7	2.5	2.6	2.3	2.6	3.3		
7542	4.4	3.9	3.3	3.5	3.1	3.8		
MEAN	2.2	2.2	2.3	2.3	2.4	2.5	2.6	2.3
SD	1.20	0.85	0.57	0.68	0.54	0.81	1.28	0.74
N	8	8	8	8	8	8	4	4
	0.1 mg base/							
7543	3.4	2.7	4.0	3.0	3.5		3.2	
7553	2.7		2.0	2.2	2.5	1.9		1.9
7545	1.9	3.2	1.7	1.6	2.0	1.7	200	
7552	2.9	3.2	2.8	2.3	3.2	2.2	2.2	1.7
7569	2.9	2.1	2.3	1.3	2.6	1.3	• •	
7560	3.7	3.9	2.9	3.1	3.4	2.4		* *
7567	2.8	2.0	3.0	2.4	2.2	4.0		-
7550	2.8	2.7	2.8	3.5	3.6	2.9		
MEAN	2.9	2.9	2.7	2.4	2.9	2.5	2.5	2.1
SD	0.53	0.63	0.71	0.75	0.63	0.88	0.54	0.43

() Dans University for NDRC - or > 10

(--)-Data Unavailable



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Lymphocytes

STUDY ID: 097 STUDY NO: 097 ABBR: Lymphocyte UNITS: 10³/cmm ANIMAL ID Week -3 Week -1 Week 2 Week 4 Week 8 Week 13 Week 18 Week 26 GROUP: 3F:2.0 mg base/kg/day
7562 1.2 2.4 2.1 2.6 2.2 1.8
7548 3.4 3.4 3.0 2.1 1.6 2.2
7571 2.6 2.6 1.3 1.5 1.8 1.8
7561 3.6 3.7 3.5 2.4 2.8 1.5
7564 2.2 2.5 2.1 2.4 2.1 1.8
7574 3.4 3.6 2.9 3.0 1.1 2.1
7556 3.8 3.7 2.1 2.6 1.9 1.6
7572 2.3 2.3 2.0 1.6 2.5 2.0 -----------2.5 2.0 2.8 2.1 1.6 1.9 2.5 ----
 2.8
 3.0
 2.4
 2.3
 2.0
 1.9
 2.1

 0.89
 0.63
 0.70
 0.51
 0.53
 0.24
 0.26

 8
 8
 8
 8
 8
 8
 4
 2.4 SD 0.52 GROUP: 4F:6.0 mg base/kg/day 1.7 1.1 1.9
1.3 1.2 1.2
0.9 1.9 2.4
2.1 1.4 4.5
2.5 2.8 0.7
1.8 2.2 2.1
1.1 2.4 3.6
1.1 1.5 1.7 1.6 1.2 1.7 0.9 1.5 1.3 2.3 2.3 0.9 3.4 1.9 2.1 2.1 2.0 2.5 2.6 2.5 1.8 2.0 2.1 1.1 1.7 1.9 1.1 1.6 0.8 7539 2.4 7563 1.7 1-4 2.3 7540 2.6 2.3 3.7 4.3 7554 3.1 --7568 1.8 7544 3.0 1.7 --7546 7551 2.1 1.9 0.74 0.42 8 8 1.8 2.3 0.61 1.25 8 8 1.6 0.56 2.6 0.89 MEAN . 2.0 2.4 SD 1.28 0.82 8 N 8 4 4

(--)-Data Unavailable

DRAFT

THIRTEEN WEEK ORAL TOXICITY STUDY OF WR 238605 WITH A THIRTEEN WEEK RECOVERY PERIOD IN DOGS

INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Monocytes

STUDY ID: 097

SEX: FEMALE
STUDY NO: 097

ABBR: Monocytes UNITS: 10^3/cmm

ABBR: Mono	cytes							UNITS: 10^3/cmm
ANIMAL ID	Week -3	Week -1	Week 2	Week 4		Week 13		Week 26
GROUP: 1F:	0 mg base/kg	/day						
7557	0.4	0.4	0.4	0.5	0.2	0.2	0.1	0.3
7541	0.3	0.1	0.2	0.5	0.3	0.2	0.1	0.3
7566	0.9	1.2	0.4	0.6	0.4	0.5	0.1	0.5
7549	0.7	0.4	0.2	0.2	0.1	0.3	0.3	0.2
7555	0.4	0.2	0.6	0.0	0.4	0.5	• •	
7558	0.5	0.3	1.0	0.7	0.2	0.6	• •	• •
7573	0.1	0.1	0.8	0.2	0.2	0.2		
7542	0.8	0.9	0.4	0.6	0.4	0.5	• •	
MEAN	0.5	0.5	0.5	0.4	0.3	0.4	0.2	0.3
SD	0.27	0.40	0.28	0.25	0.12	0.17	0.10	0.13
N	8	8	8	8	8	8	4	4
	0.1 mg base/				Date - 1997	200		2700
7543	0.3	0.1	0.1	0.5	1.0	0.4	0.3	0.4
7553	0.6	0.5	0.3	0.3	0.1	0.1	0.4	0.4
7545	0.2	0.5	0.6	0.5	0.4	0.3	0.3	0.1
7552	0.0	0.0	0.2	0.4	0.2	0.4	0.6	0.6
7569	0.3	0.5	0.2	0.3	0.3	0.1		
7560	0.4	0.7	1.0	0.3	0.5	0.1		
7567	0.6	0.8	0.5	0.3	0.2	0.8		
7550	0.2	0.3	0.3	0.1	0.6	0.3	• •	
MEAN .	0.3	0.4	0.4	0.3	0.4	0.3	0.4	0.4
SD	0.21	0.28	0.29	0.13	0.29	0.24	0.14	0.21
N	8	8	8	8	8	8	4	4

(--)-Data Unavailable



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Monocytes

STUDY ID: 097 SEX: FEMALE STUDY NO: 097

UNITS: 10^3/cmm ABBR: Monocytes

	Week -3	Week -1	Week 2			Week 13		Week 26
	:2.0 mg base/							
7562	0.6	0.2	0.3	0.3	0.1	0.3	0.2	0.0
7548	0.2	0.2	0.6	0.8	0.5	0.6	0.3	0.6
7571	0.3	0.4	0.6	0.6	0.7	0.1	0.7	0.4
7561	0.2	1.1	0.2	0.9	0.3	1.0	0.6	0.7
7564	0.3	0.5	0.6	0.8	0.5	0.5		
7574	0.3	0.2	0.5	1.2	0.7	1.4		-
7556	0.7	D.4	D.2	D.8	0.8	0.9		
7572	0.4	0.1	0.4	0.5	0.8	0.6	**	**
1EAN	0.4	0.4	0.4	0.7	0.6	0.7	0.5	0.4
SD	0.18	0.32	0.18	0.27	0.25	0.41	0.24	0.31
N	8	8	8	8	8	8	4	4
20000. / 5	:6.0 mg base/	ka (day						
7539	TOTAL TO SERVE SERVE SERVE SERVE SERVE	0.7	0.3	0.8	0.8	1.6	0.5	0.7
7563	0.8	1.2	0.7	0.6	0.6	1.4	0.3	0.8
7540	0.5	0.8	0.6	1.2	0.9	0.8		0.1
7554	0.5	0.9	0.7	0.6	1.1	1.3		0.8
7568	0.5	0.5	0.3	0.4	0.4	1.7	1.0	
	0.5	0.7	0.3	1.0	0.4	0.4		
7544 7574	0.9	0.6	1.0	0.9	0.6	0.7		
7546	7.50.5.147	0.3	0.8	0.6	1.0	0.6		
7551	0.7	0.3	0.0	0.6	1.0	0.0		
								0 1
MEAN .	0.6	0.7	0.6		0.7			
MEAN .	0.6 0.16 8	0.7 0.27 8	0.6 0.26 8	0.8 0.26 8	0.7 0.27 8			

(--)-Data Unavailable



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Eosinophils

STUDY ID: 097 STUDY NO: 097 SEX: FEMALE

NIMAL ID	Week -3	Week -1		Week 4				Week 26
ROUP: 1F:	0 mg base/kg							
557	0.1	0.1	0.1	0.0	0.1	0.1	0.3	0.1
541	0.0	0.1	0.3	0.0	0.0	0.1	0.1	0.2
566	0.2	0.1	0.6	0.6	0.4	0.7	0.1	0.8
549	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1
7555	0.1	0.2	0.1	0.2	0.0	0.2		
558	0.1	0.0	0.0	0.0	0.0	0.2		
573	0.0	0.3	0.0	0.2	0.3	0.0		
542	0.1	0.6	0.5	0.2	0.3	0.3		
EAN	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.3
SD	0.06	0.19	0.23	0.20	0.17	0.22	0.10	0.34
N	8	8	8	8	8	8	4	4
DOI ID - 2E -	0.1 mg base/	ka/day				••••••		
543	0.6	0.0	0.1	0.3	0.2	0.6	0.3	0.0
553	0.5	0.5	0.3	0.6	0.3	0.1	7,57,57,57	1.5
545	0.3	0.1	0.0	0.5	0.4	0.7	0.1	0.3
552	0.1	0.4	0.0	0.0	0.0	0.0	0.3	0.5
569	0.1	0.3	0.5	0.3	0.3	0.5	•••	
560	0.5	0.4	0.9	0.7	0.4	0.4		
567	0.2	0.1	0.5	0.3	0.4	0.1	• •	
550	0.1	0.4	0.1	0.4	0.4	0.3		
EAN -	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.6
SD	0.21	0.18	0.32	0.22	0.14	0.26	0.13	0.65
N	8	8	8	8	8	8	4	4

(--)-Data Unavailable



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Eosinophils

STUDY ID: 097 SEX: FEMALE

STUDY NO: 097

ABBR: Eosi								UNITS: 10^3/cmm
ANIMAL ID	Week -3	Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	
	2.0 mg base/							
7562	0.1	0.1	0.1	0.0	0.1	0.2	0.3	0.1
7548	0.2	0.4	0.2	0.4	0.0	0.3	0.1	0.3
7571	0.2	0.0	0.2	0.0	0.1	0.1	0.1	0.0
7561	0.2	0.3	0.0	0.0	0.3	0.0	0.1	0.1
7564	0.3	0.0	0.2	0.0	0.2	0.4		**
7574	0.2	0.1	0.0	0.1	0.0	0.2	**	
7556	0.5	0.2	0.3	0.2	0.4	0.4		**
7572	0.0	0.3	0.0	0.2	0.5	0.3	• •	**
MEAN	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.1
SD	0.15	0.15	0.12	0.15	0.19	0.14	0.10	0.13
N	8	8	8	8				4
GROUP: 4F:	6.0 mg base/	kg/day						• • • • • • • • • • • • • • • • • • • •
7539	0.3	0.3	0.2	0.3	0.2	0.1	0.3	0.2
7563	0.3	0.0	0.1	0.2	0.2	0.2	0.3	0.5
7540	0.1	0.1	0.0	0.0	0.2	0.1	0.1	0.5
7554	0.0	0.5	0.1	0.2	0.2	0.8	0.4	1.1
7568	0.1	0.1	0.1	0.0	0.2	0.2		
7544	0.8	0.3	0.2	0.2	0.5	0.0		
7546	0.0	0.0	0.0	0.1	0.3	0.2		
7551	0.9	0.2	0.1	0.2	0.4	0.4	••	
MEAN -	0.3	0.2	0.1	0.2	0.3	0.3	0.3	0.6
SD	0.35	0.17	0.08	0.11	0.12	0.25	0.13	0.38
N	8	8	8	8	8	8	4	4

(--)-Data Unavailable



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Basophils

STUDY ID: 097 SEX: FEMALE

STUDY NO: 097 ABBR: Basophils

UNITS: 10^3/cmm

ADDITE DOG	opiiico							
ANIMAL ID	Week -3	Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26
GROUP: 1F	:0 mg base/kg	a/day						• • • • • • • • • • • • • • • •
7557	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7541	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7566	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7549	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7555	0.0	0.0	0.0	0.0	0.0	0.0		
7558	0.0	0.0	0.0	0.0	0.0	0.0		
7573	0.0	0.0	0.0	0.0	0.0	0.0		
7542	0.0	0.0	0.0	0.0	0.0	0.0	• •	••
MEAN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
N	8	8	8	8	8	8	4	4
	:0.1 mg base/	kg/day						
7543	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7553	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7545	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7552	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
7569	0.0	0.0	0.0	0.0	0.0	0.0		
7560	0.0	0.0	0.0	0.0	0.0	0.0		• -
7567	0.0	0.0	0.0	0.0	0.0	0.0	••	
7550	0.0	0.0	0.0	0.0	0.0	0.0		
MEAN .	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SD	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00
N	8	8	8	8	8	8	4	4

(--)-Data Unavailable



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Basophils

STUDY ID: 097
SEX: FEMALE
STUDY NO: 097
ABBR: Basophils
UNITS: 10^3/cmm

ABBK: Bas	opnits							ONTIS: 10 S/CIII
ANIMAL ID	Week -3	Week -1	Week 2	Week 4	Week 8	Week 13	Week 18	Week 26
GROUP: 3F:	2.0 mg base/	'kg/day						
7562	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7548	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7571	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7561	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7564	0.0	0.0	0.0	0.0	0.0	0.0		
7574	0.0	0.0	0.0	0.0	0.0	0.0		
7556	0.0	0.0	0.0	0.0	0.0	0.0		
7572	0.0	0.0	0.0	0.0	0.0	0.0	••	
MEAN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
N	8	8	8	8	8	8	4	4
	6.0 mg base/	ka (day						
7539	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7563	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7540	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7554	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7568	0.0	0.0	0.0	0.0	0.0	0.0		
7544	0.0	0.0	0.0	0.0	0.0	0.0		
7546	0.0	0.0	0.0	0.0	0.0	0.0		
7551	0.0	0.0	0.0	0.0	0.0	0.0	• •	• •
MEAN .	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8		8	8		8		

(--)-Data Unavailable



RBC MORPHOLOGY OBSERVATIONS

STUDY ID: 09 STUDY NO: 09		GROUP: 1F : 0 mg ba	ace/ka/day	SEX: FEMALE
51001 NO: 09	<i>[</i>	aroor. If a ding be	ise/kg/uay	
ANIMAL ID	Week -3	Week -1	Week 2	Week 4
7557	Anisocytosis,Slight	Anisocytosis,\$light	Anisocytosis,Slight	Normal Red Blood Cells
7541	Anisocytosis,Slight	Anisocytosis,Slight; Decreased Platelets, Mod. to Marked	Anisocytosis,Slight	Normal Red Blood Cells
7566	Anisocytosis, Slight	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight
7549	Normal Red Blood Cells	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight
7555	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis, Slight	Anisocytosis,Slight
7558	Anisocytosis,Slight	Anisocytosis, Slight	Anisocytosis, Slight	Anisocytosis,Slight
7573	Normal Red Blood Cells	Anisocytosis,Slight	Anisocytosis,Slight	Normal Red Blood Cells
7542	Anisocytosis, Slight	Anisocytosis, Slight	Anisocytosis, Slight	Anisocytosis, Slight



RBC MORPHOLOGY OBSERVATIONS

STUDY ID: 097 STUDY NO: 097		GROUP: 1F : 0 mg ba	GROUP: 1F : 0 mg base/kg/day				
ANIMAL ID	Week 8	Week 13	Week 18	Week 26			
7557	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight; Macrocytes,Slight	Anisocytosis,Slight			
7541	Anisocytosis, Slight	Anisocytosis, Slight	Anisocytosis,Slight	Anisocytosis, Slight			
7566	Anisocytosis,Slight	Anisocytosis, Slight	Anisocytosis,Slight	Anisocytosis, Slight			
7549	Anisocytosis,Slight	Anisocytosis,Slight; Macrocytes,Slight	Anisocytosis,Slight	Normal Red Blood Cells			
7555	Normal Red Blood Cells	Anisocytosis,Slight	••				
7558	Anisocytosis,Slight	Anisocytosis, Slight					
7573	Anisocytosis,Slight	Anisocytosis,Slight; Macrocytes,Slight					
7542	Anisocytosis,Slight	Anisocytosis,Slight	••				



RBC MORPHOLOGY OBSERVATIONS

STUDY ID: 097 STUDY NO: 097		GROUP: 2F : 0.1 mg b	GROUP: 2F : 0.1 mg base/kg/day				
ANIMAL ID	Week -3	Week -1	Week 2	Week 4			
7543	Anisocytosis,Slight	Anisocytosis, Moderate	Anisocytosis,Slight	Anisocytosis,Slight			
7553	Normal Red Blood Cells	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight			
7545	Anisocytosis,Slight	Anisocytosis,Slight; Decreased Platelets, Mod. to Marked	Anisocytosis,Slight	Normal Red Blood Cells			
7552	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis, Slight	Anisocytosis,Slight			
7569	Normal Red Blood Cells	Anisocytosis,Slight; Decreased Platelets, Mod. to Marked	Anisocytosis,Slight	Anisocytosis,Slight			
7560	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis, Slight	Anisocytosis,Slight			
<i>7</i> 567	Normal Red Blood Cells	Anisocytosis, Moderate	Anisocytosis,Slight	Normal Red Blood Cells			
7550	Anisocytosis,Slight	Anisocytosis, Slight	Anisocytosis, Slight	Anisocytosis,Slight			



RBC MORPHOLOGY OBSERVATIONS

STUDY ID: 09 STUDY NO: 09		GROUP: 2F : 0.1 mg b	GROUP: 2F : 0.1 mg base/kg/day				
ANIMAL ID	Week 8	Week 13	Week 18	Week 26			
7543	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight			
7553	Anisocytosis,Slight	Poikilocytes,Slight; Anisocytosis,Slight	Anisocytosis,Slight	Increased Platelets, Moderate; Anisocytosis,Slight			
7545	Anisocytosis,Slight	Anisocytosis,Slight; Clumped Platelets, Mod. to Marked	Anisocytosis,Slight	Anisocytosis,Slight			
7552	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight; Macrocytes,Slight	Anisocytosis,Slight			
7569	Anisocytosis,Slight	Normal Red Blood Cells	••				
7560	Anisocytosis, Slight	Anisocytosis,Slight		••			
7567	Anisocytosis,Slight	Anisocytosis,Slight		••			
7550	Anisocytosis, Slight	Anisocytosis, Slight		••			



RBC MORPHOLOGY OBSERVATIONS

STUDY ID: 09	7			SEX: FEMALE
STUDY NO: 09		GROUP: 3F : 2.0 mg	base/kg/day	
ANIMAL ID	Week -3	Week -1	Week 2	Week 4
<i>7</i> 562	Normal Red Blood Cells	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight; Decreased Platelets, Mod. to Marked
7548	Normal Red Blood Cells	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight; Decreased Platelets, Mod. to Marked
7571	Normal Red Blood Cells	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight; Large Platelets, Slight;Decreased Platelets,Mod. to Marked
7561	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis, Slight	Anisocytosis,Slight; Macrocytes,Slight
7564	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight; Decreased Platelets, Mod. to Marked	Anisocytosis,Slight
7574	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight; Decreased Platelets, Mod. to Marked	Anisocytosis,Slight; Decreased Platelets, Slight
7556	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight; Decreased Platelets, Mod. to Marked
7572	Anisocytosis,Slight	Anisocytosis, Slight	Anisocytosis, Slight; Decreased Platelets,	Anisocytosis,Slight; Decreased Platelets,

Slight

Mod. to Marked



RBC MORPHOLOGY OBSERVATIONS

OTLINY ID. 00			***************************************	SEX: FEMALE			
STUDY ID: 09 STUDY NO: 09		GROUP: 3F : 2.0 mg	GROUP: 3F : 2.0 mg base/kg/day				
ANIMAL ID	Week 8	Week 13	Week 18	Week 26			
7562	Normal Red Blood Cells;Decreased Platelets,Mod. to Marked	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis, Moderate			
7548	Normal Red Blood Cells	Normal Red Blood Cells	Anisocytosis,Slight	Poikilocytes,Slight; Anisocytosis,Slight			
7571	Normal Red Blood Cells;Decreased Platelets,Slight	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight			
7561	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis, Slight	Normal Red Blood Cells			
7564	Anisocytosis,Slight	Anisocytosis,Slight		••			
7574	Anisocytosis,Slight	Anisocytosis,Slight					
7556	Anisocytosis,Slight	Anisocytosis,Slight		••			
7572	Anisocytosis.Slight	Anisocytosis, Slight		**			



RBC MORPHOLOGY OBSERVATIONS

STUDY ID: 097 STUDY NO: 097		GROUP: 4F : 6.0 mg b	ase/kg/day	SEX: FEMALE
ANIMAL ID	Week -3	Week -1	Week 2	Week 4
7539	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight; Decreased Platelets, Mod. to Marked	Anisocytosis, Moderate;Decreased Platelets,Mod. to Marked
7563	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight	Normal Red Blood Cells
7540	Anisocytosis,Slight	Anisocytosis,Slight	Polychromasia,Slight Anisocytosis, Moderate;Large Platelets,Slight; Decreased Platelets, Mod. to Marked	Normal Red Blood Cells
7554	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight; Decreased Platelets, Slight	Anisocytosis, Moderate
7568	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis,Slight; Decreased Platelets, Mod. to Marked	Anisocytosis, Slight; Decreased Platelets, Mod. to Marked
7544	Anisocytosis,Slight	Anisocytosis,Slight	Anisocytosis, Moderate;Decreased Platelets,Mod. to Marked	Anisocytosis,Slight; Macrocytes,Slight
7546	Anisocytosis,Slight	Anisocytosis,Slight	Large Platelets, Slight;Decreased Platelets,Mod. to Marked;Anisocytosis, Moderate	Anisocytosis, Moderate;Decreased Platelets,Mod. to Marked
7551	Normal Red Blood Cells	Anisocytosis,Slight	Anisocytosis, Moderate;Large Platelets,Slight; Decreased Platelets, Mod. to Marked	Anisocytosis, Moderate;Large Platelets,Slight; Decreased Platelets, Mod. to Marked



RBC MORPHOLOGY OBSERVATIONS

STUDY ID: 097 STUDY NO: 097 GROUP: 4F : 6.0 mg base/kg/day ANIMAL ID Week 8 Week 13 Week 18 Week 26 7539 Anisocytosis, Slight; Anisocytosis, Slight Anisocytosis, Slight Normal Red Blood Decreased Platelets, Cells Slight 7563 Anisocytosis, Slight Anisocytosis, Slight Anisocytosis, Slight Anisocytosis, Slight 7540 Anisocytosis, Slight Anisocytosis, Slight; Anisocytosis, Slight Normal Red Blood Macrocytes, Slight Cells 7554 Anisocytosis, Slight Anisocytosis, Slight Anisocytosis, Slight Anisocytosis, Slight 7568 Anisocytosis, Slight; Anisocytosis, Slight; Decreased Platelets, Macrocytes, Slight Slight 7544 Anisocytosis, Slight Anisocytosis, Slight

Anisocytosis, Slight;

Anisocytosis, Slight; Decreased Platelets,

Macrocytes, Slight

Moderate

7546

7551

Anisocytosis, Slight;

Decreased Platelets,

Anisocytosis, Slight;

Decreased Platelets,

Moderate

APPENDIX 8

Individual Urinalysis Data

A. Abbreviations

APP	=	Appearance	DY	=	Dark Yellow
SG	=	Specific Gravity	PY	=	Pale Yellow
PRO	=	Protein	LY	=	Light Yellow
GLU	=	Glucose	BR	=	Brown
KET	=	Ketones	AM	=	Amber
BILI	=	Bilirubin	>	=	Greater than
BL	=	Blood	FAT	=	Fatty
URO	=	Urobilinogen	WH	=	White
LEU	=	Leukocytes	BY	=	Bright Yellow
NIT	=	Nitrite	CL	=	Colorless
EPI	=	Epithelial	E	=	Erythrocyte
SQ	=	Squamous	FG	=	Fine Granular
TRANS	=	Transitional	CG	=	Course Granular
NA		Not Applicable	HY	=	Hyaline
TP	=	Triple Phosphate	GR	=	Granular
QNS	=	Quantity Not Sufficient	S	=	Starch
Y	=	Yellow	RC	=	Red Cell
			WC	=	Waxv

B. Quali

= Yellow itative Eval	uation	RC = Red C WC = Waxy	ell
Protein:	Negative Trace 1+ (30 mg/dl) 2+ (100 mg/dl) 3+ (500 mg/dl)	Bilirubin:	Negative 1+ (slight) 2+ (moderate) 3+ (marked)
Glucose:	Normal Trace (1/20 g/dl) 1+ (1/10 g/dl) 2+ (1/4 g/dl) 3+ (1/2 g/dl)	Blood:	Negative 5-10 Ery/ul 50 Ery/ul 250 Ery/ul
Ketones:	4+ (1 g/dl) Negative 1+ (slight amount)	Leukocytes:	Negative Trace 1+ (moderate) 2+ (marked)

1+ (slight amount)
2+ (moderate)

3+ (large)

Nitrite:

Negative Positive

Urobilinogen: Normal

1+ (1 mg/dl) 2+ (4 mg/dl) 3+ (8 mg/dl) 4+ (12 mg/dl)

C. Microscopic Examination: Five fields are examined.

av. #/10x field Casts: RBC's: av. #/45x field av. #/45x field WBC's:

Epithelial Cells - Squamous: av. #/45x field - Transitional: av. #/45x field - Renal: av. #/45x field

Crystals; Bacteria; Sperm; Mucus - 0 = Negative 1+ = Occasional

2+ = Seen in every field

3+ = Large amounts in every field

4+ = Full fields

UIC/TRL Study No. 097

THIRTEEN WEEK ORAL TOXICITY STUDY OF WR238605 WITH A THIRTEEN WEEK RECOVERY PERIOD IN DOGS

Male Urinalysis Data (Week -1)

DOSE LEVEL (mg/kg/day)	ANIMAL NO.	APP	SG	COLOR	NIT	LEU	pН	PROT	GLU g/dl	KET	URO	BiLI	BLOOD Ery/ul
	7505	HAZY	1.008	LY	POS	TRACE	7	TRACE	NOR	NEG	NOR	NEG	5-10
	7512	HAZY	1.078	DY	NEG	NEG	6	+	NOR	NEG	NOR	NEG	50
	7515	HAZY	1.040	Y	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7520	HAZY	1.030	Y	NEG	+	6	TRACE	NOR	NEG	NOR	NEG	5-10
0	7521	HAZY	1.024	LY	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	50
	7531	CLEAR	1.090	DY	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7532	CLEAR	1.090	Y	NEG	NEG	5	TRACE	NOR	NEG	NOR	NEG	NEG
	7533	HAZY	1.066	Y	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7503	CLEAR	1.040	DY	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	5-10
	7517	HAZY	1.024	Y	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	5-10
	7519	HAZY	1.038	DY	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	5 - 10
0.1	7523	HAZY	1.070	Y	NEG	NEG	7	TRACE	NOR	NEG	NOR	NEG	NEG
	7527	CLOUDY	1.056	DY	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	5-10
	7528	HAZY	1.075	AM	NEG	++	8	+	NOR	NEG	NOR	NEG	NEG
	7529	HAZY	1.126	Y	NEG	NEG	5	TRACE	NOR	NEG	NOR	NEG	50
	7536	HAZY	1.026	LY	NEG	+	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7502	CLOUDY	1.132	AM	NEG	NEG	6	+	NOR	NEG	NOR	NEG	50
	7506	CLOUDY	1.052	DY	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	250
	7510	HAZY	1.052	DY	NEG	NEG	6	NEG	NOR	NEG	NOR	NEG	250
	7514	HAZY	1.066	Y	NEG	TRACE	6	TRACE	NOR	NEG	NOR	NEG	5-10
2.0	7516	HAZY	1.042	Y	NEG	NEG	7	TRACE	NOR	NEG	NOR	NEG	NEG
	7522	CLOUDY	1.081	DY	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7538	•	1.018	LY	NEG	++	7	NEG	NOR	NEG	NOR	NEG	NEG
	7576	CLEAR	1.070	DY	NEG	NEG	5	TRACE	NOR	NEG	NOR	NEG	NEG
	7507	CLEAR	1.052	Y	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG .
	7508	CLOUDY	1.096	DY	NEG	+	6	TRACE	NOR	NEG	NOR	NEG	5-10
	7509	CLOUDY	1.093	DY	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7511	HAZY	1.040	Y	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
6.0	7518	CLOUDY	1.014	Y	POS	++	7	TRACE	NOR	NEG	NOR	NEG	250
	7524	CLEAR	1.017	Y	NEG	++	5	TRACE	NOR	NEG	NOR	NEG	50
	7530	HAZY	1.036	Y	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	50
	7535	HAZY	1.034	Y	NEG	+	7	TRACE	NOR	NEG	NOR	NEG	5-10

^{*}Inadvertently not collected.

Male Urinalysis Data (Week -1)



DOSE LEVEL (mg/kg/day)	ANIMAL NO.	CASTS	RBC	WBC		ITHELIAL TRANS		CRYSTALS	BACTERIA	SPERM	MUCUS
	7505	0	2	0	0	0	0	0	1+	0	0
	7512	1 FG 4 HY	0	1	2	0	0	1+ TP	1+	0	0
	7515	1 CG	0	0	1	0	0	I+ TP	1+	1+	0
0	7520	1 HY	10	4	2	0	0	0	2+	0	0
	7521	1 FG	0	0	1	0	0	0	1+	1+	0
	7531	1 HY 1 FG	1	2	1	0	0	I+ TP	1+	0	0
	7532	3 HY	0	1	2	0	0	0	1+	0	0
	7533	2 CGH	3	10	1	0	0	0	1+	1+	0
	7503	1 FG 2 HY	10	0	1	0	0	0	1+	0	0
	7517	3 HY	2	0	4	0	0	1+ TP	1+	0	0
	7519	4 HY	10	1	5	0	0	I+ TP	1+	0	0
	7523	1 CG	0	2	1	0	0	2+ TP	1+	1+	0
0.1	7527	2 FG	15	3	2	0	0	0	1+	0	0
	7528	2 FG 1 CG	1	0	3	0	0	I+ TP	1+	0	0
	7529	1 FG	52	3	1	0	0	I+ TP	1+	0	0
	7536	1 FG	0	2	0	0	0	0	1+	1+	0
	7502	4 HY 1 FG	20	2	3	0	0	I+ TP	1+	0	0
	7506	1 HY	4	0	2	0	0	2+ TP	2+	0	0
	7510	1 FG	20	14	1	0	0	0	1+	1+	0
2.0	7514	1 FG	45	0	2	0	0	I+ TP	1+	1+	0
	7516	1 FG	0	16	0	0	0	1+ TP	1+	0	0
	7522	2 FG 4 HY	10	2	1	0	0	0	1+	1+	0
	7538	0	0	0	5	0	0	0	1+	1+	0
	7576	3 HY 3 FG	1	0	1	0	0	0	1+	0	0
	7507	3 HY 1 FG	25	0	1	0	0	1+ TP	1+	0	0
	7508	0	0	0	0	0	0	2+ TP	1+	0	0
	7509	0	1	10	1	0	0	l+ TP	1+	1+	0
	7511	1 CG 1 FG	3	10	1	0	0	0	1+	0	0
6.0	7518	2 HY	1	0	2	0	0	0	2+ .	0	0
	7524	3 FG 4 HY	3	0	2	0	0	0	1+	0	0
	7530	1 FG	0	12	4	0	0	l+ TP	1+	1+	0
	7535	1 FG	5	4	0	0	0	1+ TP	1+	1+	0

DRAFT

UIC/TRL Study No. 097

THIRTEEN WEEK ORAL TOXICTTY STUDY OF WR238605 WITH A THIRTEEN WEEK RECOVERY PERIOD IN DOGS

Female Urinalysis Data (Week -1)

DOSE LEVEL (mg/kg/day)	ANIMAL NO.	APP	SG	COLOR	NIT	LEU	pН	PROT	GLU g/dl	KET	URO	BILI	BLOOD Ery/ul
	7541	HAZY	1.090	Y	NEG	NEG	5	NEG	NOR	NEG	NOR	NEG	5-10
	7542	HAZY	1.081	Y	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	50
	7549	HAZY	1.084	DY	POS	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7555	HAZY	1.093	Y	NEG	NEG	9	TRACE	NOR	NEG	NOR	NEG	NEG
0	7557	CLEAR	1.075	Y	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7558	CLOUDY	1.105	DY	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7566	CLEAR	1.035	Y	NEG	NEG	8	TRACE	NOR	NEG	NOR	NEG	50
	7573	HAZY	1.042	Y	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	5-10
	7543	HAZY	1,048	Y	NEG	NEG	7	TRACE	NOR	NEG	NOR	NEG	NEG
	7545	HAZY	1.050	Y	POS	NEG	5	TRACE	NOR	NEG	NOR	NEG	5-10
	7550	HAZY	1.045	AM	POS	++	8	TRACE	NOR	NEG	NOR	NEG	50
0.1	7552	HAZY	1.112	DY	NEG	NEG	5	TRACE	NOR	NEG	NOR	NEG	NEG
	7553	CLEAR	1.044	Y	POS	NEG	6	TRACE	NOR	NEG	NOR	NEG	5-10
	7560	CLOUDY	1.040	Y	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	50
	7567	CLEAR	1.060	DY	NEG	TRACE	8	TRACE	NOR	NEG	NOR	NEG	50
	7569	HAZY	1.050	Y	NEG	NEG	6	NEG	NOR	NEG	NOR	NEG	NEG
	7548	HAZY	1.044	LY	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7556	HAZY	1.072	Y	NEG	NEG	7	TRACE	NOR	NEG	NOR	NEG	NEG
	7561	HAZY	1.036	DY	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7562	CLEAR	1.044	Y	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	250
2.0	7564	HAZY	1.068	Y	NEG	NEG	5	TRACE	NOR	NEG	NOR	NEG	NEG
	7571	CLOUDY	1.015	Y	POS	2+	1	TRACE	NOR	NEG	NOR	NEG	250
	7572	HAZY	1.040	Y	POS	NEG	6	TRACE	NOR	NEG	NOR	NEG	50
	7574	HAZY	1.030	LY	NEG	NEG	8	TRACE	NOR	NEG	NOR	NEG	50
	7539	CLEAR	1,044	Y	NEG	NEG	7	TRACE	NOR	NEG	NOR	NEG	NEG
	7540	CLOUDY	1.096	AM	NEG	NEG	5	TRACE	NOR	NEG	NOR	NEG	5-10
	7544	CLOUDY	1.020	Y	POS	NEG		1+	NOR	NEG	NOR	NEG	50
	7546	CLOUDY	1.072	Y	NEG	NEG	5	TRACE	NOR	NEG	NOR	NEG	NEG
6.0	7551	CLEAR	1.064	Y	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7554	HAZY	1.062	Y	NEG	NEG	8	TRACE	NOR	NEG	NOR	NEG	NEG
	7563	HAZY	1.120	Y	NEG	NEG	7	TRACE	NOR	NEG	NOR	NEG	NEG
	7568	HAZY	1.062	LY	POS	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG

Female Urinalysis Data (Week -1)

DRAFT

DOSE LEVEL (mg/kg/day)	ANIMAL NO.	CASTS	RBC	WBC		THELIAL TRANS		CRYSTALS	BACTERIA	SPERM	MUCUS
	7541	1 FG	0	0	2	0	0	1+ TP	1+	0	0
	7542	1 FG	0	0	5	0	0	. 0	1+	0	0
	7549	1 GH 2 FG	1	5	o	0	0	2+ TP	1+	0	0
0	7555	1 CG	0	0	1	0	0	2+ TP	1+	o	0
	7557	1 HY 3 FG	6	1	1	0	o	1+ TP	1+	0	0
	7558	7 FG 1 CG	0	10	0	0	0	1+ TP	1+	0	0
	7566	1 HY	3	1	1	0	0	2+ TP	2+	0	0
	7573	3 HY	4	0	1	0	0	0	1+	0	0
	7543	2 FG	0	3	0	0	0	1+ TP	1+	0	0
	7545	4 HY 1 FG	4	I	5	1	0	1+ TP	2+	0	0
	7550	2 HY	1	0	2	0	0	3+ TP	2+	0	0
0.1	7552	4 HY 1 FG	0	0	3	0	0	I+ TP	1+	0	0
	7553	2 HY	5	0	2	1	0	1+ TP	1+	0	0
	7560	1 CG		0	3	0	0	1+ TP	1+	0	0
	7567	2 HY 1 FG	0	2	1	0	0	2+ TP	1+	0	0
	7569	1 FG	0	0	0	0	0	1+ TP	1+	0	o
	7548	1 HY 1 FG	7	0	1	1	o	1+ TP	1+	0	0
	7556	0	11	4	0	0	0	1+ TP	1+	0	0
	7561	3 HY 1 FG	2	0	2	1	0	1+ TP	1+	0	o
2.0	7562	2 HY 1 FG	4	2	2	0	0	1+ TP	1+	o	0
	7564	1 FG	0	0	20	0	0	0	1+	0	0
	7571	1 HY	4	0	o	1	0	2+ TP	4+	0	0
	7572	0	o	3	2	1	0	0	1+	0	0
	7574	0	o	0	1	0	0	I+ TP	1+	0	0
	7539	1 HY	2	1	1	0	0	1+ TP	2+	0	0
	7540	з нү	4	2	4	1	0	2+ TP	1+	0	0
	7544	2 FG	4	0	3	1	0	1+ TP	1+	0	0
	7546	4 HY	0	0	0	0	0	I+ TP	1+	0	0
6.0	7551	2 FG	2	5	1	0	0	0	1+	0	0
	7554	1 FG	0	0	5	0	0	I+ TP	1+	0	0
	7563	1 CG 1 FG	0	2	0	0	0	2+ TP	1+	0	0
	7568	ı CG	0	0	0	0	0	1+ TP	1+	0	0

Male Urinalysis Data (Week 2)

DRAFT

DOSE LEVEL (mg/kg/dsy)	ANIMAL NO.	APP	\$G	COLOR	NIT	LEU	рН	PROT	GLU g/dl	KET	URO	BILI	BLOOD Ery/ul
-	7505	CLEAR	1.040	LY	NEG	NEG	5	NEG	NOR	NEG	NOR	NEG	5-10
	7512	CLEAR	1.084	Y	NEG	++	7	+	NOR	NEG	NOR	NEG	5-10
	7515	HAZY	1.026	Y	NEG	+	6	TRACE	NOR	NEG	NOR	NEG	5-10
	7520	CLOUDY	1.040	Y	POS	++	7	TRACE	NOR	NEG	NOR	NEG	5-10
0	7521	HAZY	1.064	DY	NEG	NEG	6	NEG	NOR	NEG	NOR	NEG	NEG
	7531	CLEAR	1.116	DY	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7532	CLOUDY	1.019	Y	POS	+	7	TRACE	NOR	NEG	NOR	NEG	50
	7533	CLOUDY	1.093	AM	POS	++	6	+	NOR	NEG	NOR	NEG	5-10
	7503	CLOUDY	1.056	Y	NEG	+	6	TRACE	NOR	NEG	NOR	NEG	50
	7517	CLOUDY	1.075	DY	NEG	++	6	TRACE	NOR	NEG	NOR	NEG	5-10
	7519	HAZY	1.075	DY	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7523	CLEAR	1.048	Y	NEG	NEG	7	TRACE	NOR	NEG	NOR	NEG	NEG
0.1	7527	CLEAR	1.042	LY	NEG	+	6	TRACE	NOR	NEG	NOR	NEG	5-10
	7528	TURBID	1.042	AM	NEG	++	7	TRACE	NOR	NEG	NOR	NEG	250
	7529	HAZY	1.116	DY	NEG	NEG	5	TRACE	NOR	NEG	NOR	NEG	NEG
	7536	HAZY	1.099	DY	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7502	HAZY	1.066	AM	NEG	NEG	6	+	NOR	NEG	NOR	NEG	50
	7506	CLOUDY	1.081	DY	NEG	+	6	TRACE	NOR	NEG	NOR	NEG	50
	7510	CLOUDY	1.090	DY	NEG	++	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7514	CLOUDY	1.078	DY	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
2.0	7516	CLODUY	1.064	DY	NEG	++	6	+	NOR	NEG	NOR	NEG	50
	7522	TURBID	1.165	BR	NEG	NEG	6	+	NOR	NEG	NOR	NEG	NEG
	7538	CLEAR	1.050	DY .	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7576	CLOUDY	1.087	DY	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
, , ,	7507	CLEAR	1.021	Y	NEG	NEG	7	NEG	NOR	NEG	NOR	NEG	NEG
	7508	TURBID	1.099	DY	NEG	+	6	TRACE	NOR	NEG	NOR	NEG	5-10
	7509	CLOUDY	1.090	DY	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7511	CLOUDY	1.075	DY	NEG	TRACE	6	TRACE	NOR	NEG	NOR	NEG	50
6.0	7518	CLOUDY	1.084	АМ	NEG	+	7	TRACE	NOR	NEG	NOR	NEG	5-10
	7524	TURBID	1.150	BR	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7530	CLOUDY	1.056	DY	NEG	++	6	TRACE	NOR	NEG	NOR	NEG	50
	7535	CLOUDY	1.066	DY	NEG	+	6	+	NOR	NEG	NOR	NEG	5-10

Male Urinalysis Data (Week 2)



DOSE LEVEL (mg/kg/day)	ANIMAL NO.	CASTS	RBC	WBC		ITHELIAL TRANS	CELLS RENAL	CRYSTALS	BACTERIA	SPERM	MUCUS
	7505	2 HY	2	0	3	0	0	1+ TP	1+	0	0
	7512	2 HY	2	0	3	0	0	3+ TP	1+	0	0
	7515	4 HY	23	2	2	0	0	0	1+	0	0
	7520	3 HY	20	4	2	0	0	3+ TP	2+	1+	0
0	7521	1 CG	20	3	2	1	0	1+ TP	1+	1+	0
	7531	1 HY	0	0	2	0	0	4+ TP	1+	0	0
	7532	0	0	0	0	0	0	1+ TP	2+	0	0
	7533	1 HY	6	0	1	0	0	1+ TP	1+	2+	0
-	7503	1 FG 2 HY	15	0	1	1	0	0	1+	0	0
	7517	I HY	30	10	5	0	0	1+ TP	1+	1+	0
	7519	1 HY	10	0	3	1	0	0	1+	2+	0
0.1	7523	1 HY	0	1	2	0	0	1+ TP	1+	1+	0
0.1	7527	l HY	4	0	2	0	0	0	3+	0	0
	7528	l HY	15	0	1	0	0	1+ TP	1+	0	0
	7529	1 FG	0	50	1	0	0	I+ TP	1+	1+	0
	7536	2 FG 5 HY	3	1	3	0	0	1+ TP	2+	0	0
	7502	3 FG	5	2	4	0	0	3+ TP	1+	0	0
	7506	1 CG	6	0	4	0	0	1+ TP	1+	0	0
	7510	1 HY 1 CG	6	0	4	0	0	2+ TP	1+	1+	0
2.0	7514	5 FG 1 HY	4	2	1	0	0	1+ TP	1+	1+	0
	7516	2 FG	50	5	10	0	0	2+ TP	1+	0	0
	7522	I FG	0	0	1	0	0	2+ TP	1+	1+	0
	7538	3 FG	0	0	2	0	0	2+ TP	1+	1+	0
	7576	1 HY	0	0	4	0	0	_ 0	1+	0	0
	7507	2 FG	15	0	1	0	0	1+ TP	1+	1+	0
	7508	l HY	5	10	3	0	0	1+ TP	1+	0	0
	7509	ı FG	4	0	0	0	0	I+ TP	2+	0	0
	7511	2 HY 1 FG	4	0	4	0	0	I+ TP	2+	1+	0
6.0	7518	3 HY	10	2	1	0	0	2+ TP	1+	0	0
	7524	1 FG	0	0	0	0	0	I+ TP	1+	0	0
	7530	l FG l HY	10	0	3	0	0	1+ TP	1+	1+	0
*	7535	I FG	10	0	1	0	0	I+ TP	1+	0	0

Female Urinalysis Data (Week 2)

DOSE LEVEL (mg/kg/day)	ANIMAL NO.	APP	SG	COLOR	NIT	LEU	рН	PROT	g/dl GLU	KET	URO	ВПЛ	BLOOD Ery/ul
	7541	HAZY	1.099	DY	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	5-10
	7542	HAZY	1.070	Y	NEG	+	6	TRACE	NOR	NEG	NOR	NEG	5-10
	7549	CLOUDY	1.040	Y	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	5-10
	7555	CLOUDY	1.096	DY	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	50
0	7557	CLEAR	1.081	LY	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7558	HAZY	1.093	AM	NEG	++	6	TRACE	NOR	NEG	NOR	NEG	5-10
	7566	CLOUDY	1.052	DY	NEG	++	6	TRACE	NOR	NEG	NOR	NEG	5-10
	7573	CLEAR	1.042	LY	NEG	NEG	7	+	NOR	NEG	NOR	NEG	5-10
	7543	CLEAR	1.105	DY	NEG	NEG	9	TRACE	NOR	NEG	NOR	NEG	NEG
	7545	CLEAR	1.027	Y	POS	+	6	TRACE	NOR	NEG	NOR	NEG	50
	7550	CLOUDY	1.120	BR	NEG	NEG	6	+	NOR	NEG	NOR	NEG	50
0.1	7552	TURBID	1.112	AM	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7553	HAZY	1.054	Y	NEG	++	7	TRACE	NOR	NEG	NOR	NEG	5-10
	7560	CLOUDY	1.042	DY	NEG	NEG	6	NEG	NOR	NEG	NOR	NEG	NEG
	7567	HAZY	1.078	DY	NEG	++	6	+	NOR	NEG	NOR	NEG	50
	7569	HAZY	1.044	Y	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7548	HAZY	1.050	DY	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7556	HAZY	1.066	DY	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	5-10
	7561	CLEAR	1.064	DY	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7562	CLOUDY	1.081	DY	NEG	NEG	9	+	NOR	NEG	NOR	NEG	NEG
2.0	7564	HAZY	1.120	AM	NEG	NEG	1	+	NOR	NEG	NOR	NEG	NEG
	7571	HAZY	1.046	Y	NEG	NEG	7	TRACE	NOR	NEG	NOR	NEG	NEG
	7572	CLOUDY	1.044	DY	POS	++	6	TRACE	NOR	NEG	NOR	NEG	50
	7574	CLEAR	1.078	DY	NEG	NEG	7	TRACE	NOR	NEG	NOR	NEG	NEG
	7539	CLEAR	1.050	DY	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7540	TURBID	1.090	DY	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7544	CLOUDY	1.054	DY	NEG	NEG	7	TRACE	NOR	NEG	NOR	NEG	NEG
200000	7546	HAZY	1.112	BR	NEG	NEG	7	+	NOR	NEG	NOR	NEG	NEG
6.0	7551	CLOUDY	1.069	DY	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	5-10
	7554	HAZY	1.072	DY	POS	NEG	7	TRACE	NOR	NEG	NOR	NEG	50
	7563	HAZY	1.057	DY	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7568	CLOUDY	1.075	DY	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG

Female Urinalysis Data (Week 2)



DOSE LEVEL (mg/kg/day)	ANIMAL NO.	CASTS	RBC	WBC		THELIAL TRANS		CRYSTALS	BACTERIA	SPERM	MUCUS
	7541	1 HY	0	0	2	0	0	0	1+	0	0
	7542	2 HY	0	0	0	0	0	1+ TP	I+	0	0
	7549	1 HY 1 CG	50	10	7	0	0	2+ TP	1+	1+	0
0	7555	2 HY	5	0	0	0	0	2+ TP	1+	0	0
	7557	I HY	3	0	4	0	0	2+ TP	1+	0	0
	7558	1 HY	15	3	4	0	0	1+ TP	1+	0	0
	7566	1 FG	150	0	5	0	0	2+ TP	1+	0	0
	7573	0	2	0	1	0	0	3+ TP	1+	0	0
	7543	0	10	1	2	1	0	2+ TP	2+	0	0
	7545	1 HY	10	1	5	1	0	0	1+	0	0
	7550	0	1	0	1	1	0	I+ TP	1+	0	0
	7552	1 FG	8	0	3	0	0	2+ TP	1+	0	0
0.1	7553	2 HY	20	0	4	4	0	3+ TP	1+	0	0
	7560	1 CG 2 FG 1 HY	0	4	0	1	0	I+ TP	2+	0	0
	7567	1 FG	5	0	1	0	0	I+ TP	1+	1+	0
	7569	0	2	0	3	i	0	I+ TP	1+	0	0
V	7548	4 HY	10	2	8	3	0	2+ TP	1+	0	0
	7556	1 FG 3 HY	8	0	1	0	0	0	1+	0	0
	7561	1 FG	2	5	3	0	0	1+ TP	1+	0	0
2.0	7562	2 HY	2	0	1	0	0	I+ TP	1+	0	0
	7564	4 HY	2	0	3	0	0	2+ TP	1+	0	0
	7571	5 HY	2	0	6	1	0	1+ TP	1+	0	0
	7572	10 HY	0	0	5	0	0	0	2+	0	0
	7574	0	0	0	2	0	0	1+ TP	1+	0	0
	7539	3 HY	3	0	2	1	0	0	1+	0	0
	7540	1 FG	0	0	3	0	0	0	1+	0	0
	7544	4 CG	8	10	5	1	0	2+ TP	1+	0	0
	7546	2 HY	0	0	3	1	1	1+ TP	1+	0	0
6.0	7551	3 HY 7 FG	0	0	8	1	0	I+ TP	1+	0	0
	7554	2 FG	3	0	2	0	0	2+ TP	1+	0	0
	7563	l HY l FG	3	0	1	0	0	0	1+	0	0
	7568	1 FG	0	0	0	1	0	1+ TP	1+	0	0

DRAFT UIC/TRL Study No. 097

THIRTEEN WEEK ORAL TOXICITY STUDY OF WR238605 WITH A THIRTEEN WEEK RECOVERY PERIOD IN DOGS

Male Urinalysis Data (Week 4)

DOSE LEVEL (mg/kg/day)	ANIMAL NO.	APP	SG	COLOR	NIT	LEU	pН	PROT	GLU g/dl	KET	URO	BILI	BLOOD Ery/ul
	7505	CLEAR	1.038	Y	NEG	+	6	TRACE	NOR	NEG	NOR	NEG	5-10
	7512	HAZY	1.093	Y	NEG	NEG	6	NEG	NOR	NEG	NOR	NEG	5-10
	7515	CLEAR	1.030	Y	NEG	+	6	TRACE	NOR	NEG	NOR	NEG	5-10
	7520	CLOUDY	1.060	Y	NEG	+	6	TRACE	NOR	NEG	NOR	NEG	50
0	7521	CLOUDY	1.0215	DY	POS	++	8	TRACE	NOR	NEG	NOR	NEG	250
	7531	CLEAR	1.046	Y	NEG	TRACE	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7532	TURBID	1.030	DY	NEG	TRACE	7	TRACE	NOR	NEG	NOR	NEG	50
	7533	HAZY	1.143	DY	NEG	TRACE	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7503	CLOUDY	1.035	Y	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7517	CLOUDY	1.046	Y	NEG	+	8	TRACE	NOR	NEG	NOR	NEG	50
	7519	CLOUDY	1.066	Y	NEG	+	6	TRACE	NOR	NEG	NOR	NEG	5-10
0.1	7523	HAZY	1.048	Y	NEG	++	6	TRACE	NOR	NEG	NOR	NEG	5-10
	7527	HAZY	1.084	Y	NEG	TRACE	5	TRACE	NOR	NEG	NOR	NEG	5-10
	7528	CLOUDY	1.030	DY	POS	++	7	+	1/20	NEG	NOR	NEG	250
	7529	CLOUDY	1.090	DY	NEG	+	6	TRACE	NOR	NEG	NOR	NEG	50
	7536	CLOUDY	1.090	DY	NEG	NEG	5	TRACE	NOR	NEG	NOR	NEG	50
	7502	HAZY	1.046	DY	NEG	+	7	TRACE	NOR	NEG	NOR	+	5-10
	7506	CLOUDY	1.038	DY	NEG	+	6	TRACE	NOR	NEG	NOR	NEG	50
	7510	CLOUDY	1.056	DY	NEG	++	6	TRACE	NOR	NEG	NOR	NEG	5-10
	7514	HAZY	1.062	DY	NEG	NEG	6	TRACE	NOR	NEG	•	NEG	5-10
2.0	7516	HAZY	1.070	AM	NEG	++	6	TRACE	NOR	NEG	NOR	++	5-10
	7522	HAZY	1.058	AM	NEG	++	6	TRACE	NOR	NEG	NOR	NEG	50
	7538	HAZY	1.070	AM	NEG	NEG	6	TRACE	NOR	NEG	NOR	+	NEG
	7576	CLEAR	1.064	DY	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
5	7507	CLEAR	1.068	DY	NEG	TRACE	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7508	CLOUDY	1.060	AM	POS	+	6	TRACE	NOR	NEG	NOR	NEG	50
	7509	CLEAR	1.084	DY	NEG	NEG	5	TRACE	NOR	NEG	NOR	**	5-10
	7511	HAZY	1,099	DY	NEG	TRACE	6	TRACE	NOR	NEG	NOR	NEG	5-10
6.0	7518	HAZY	1.016	Y	NEG	TRACE	6	TRACE	NOR	NEG	NOR	NEG	5-10
	7524	CLOUDY	1.112	AM	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	5 - 10
	7530	CLEAR	1.155	AM	NEG	NEG	5	TRACE	NOR	NEG	NOR	NEG	5-10
	7535	CLOUDY	1.090	DY	POS	++	7	TRACE	NOR	NEG	NOR	NEG	NEG

^{*}Inadvertently not collected.

Male Urinalysis Data (Week 4)

DRAFT

DOSE LEVEL (mg/kg/day)	ANIMAL NO.	CASTS	RBC	WBC		ITHELIAL TRANS		CRYSTALS	BACTERIA	SPERM	MUCUS
	7505	3 HY 1 FG	4	0	6	0	0	1+ TP	1+	1+	0
	7512	1 FG	15	0	2	1	0	1+ TP	1+	0	0
	75 15°										
0	7520	2 HY	50	10	5	1	0	2+ TP	1+	1+	0
	7521	3 HY	2	0	1	0	0	1+ TP	3+	0	0
	7531	з НҮ	1	0	2	0	0	1+ TP	1+	0	0
	7532	1 HY	0	0	3	0	0	1+ TP	2+	0	0
	7533	1 HY	4	0	4	0	0	1+ TP	1+	0	0
* "	7503°										
	7517	1 HY	1	0	2	0	0	2+ TP	1+	0	0
	75 19	1 HY 1 FG	30	2	2	0	0	0	1+	1+	0
0.1	7523	1 FG	58	1	1	1	0	0	1+	1+	0
	7527	1 FG	35	5	1	0	0	1+ TP	1+	0	0
	7528	2 HY	4	0	3	0	0	0	1+	0	0
	7529	1 FG	20	2	0	0	0	1+ TP	1+	1+	0
	7536	1 HY	70	1	1	0	0	0	1+	1+	0
	7502	2 HY	20	0	2	0	0	1+ TP	1+	0	0
	7506	2 HY	1	0	2	0	0	0	3+	0	0
	7510	1 HY	20	0	3	0	0	1+ TP	1+	1+	0
2.0	7514	4 FG 1 HY	50	0	0	0	0	0	1+	1+	0
	7516	i HY	50	0	5	0	0	1+ TP	1+	0	0
	7522	1 FG 1 HY	8	2	4	0	0	1+ TP	1+	1+	0
	7538	2 FG	0	0	1	0	0	. 1+ TP	1+	2+	0
	7576	1 HY 2 FG	0	0	7	0	0	1+ TP	1+	1+	0
	7507	1 HY 1 FG	10	0	0	1	0	0	1+	1+	0
	7508	2 FG 1 HY	0	0	4	0	0	1+ TP	1+	0	0
	7509	2 FG	25	0	0	1	0	0	1+	2+	0
6.0	7511	1 CG 1 HY	12	1	1	0	0	1+ TP	1+	1+	0
(747.00)	7518	0	4	0	1	0	0	1+ TP	1+	2+	0
	7524	2 FG	10	0	3	0	0	1+ TP	1+	1+	0
	7530	1 FG	0	2	2	0	0	I+ TP	1+	1+	0
	7535	1 HY	0	0	1	0	0	1+ TP	1+	0	0

^{&#}x27;Inadvertently not collected.

DRAFT

UIC/TRL Study No. 097

THIRTEEN WEEK ORAL TOXICITY STUDY OF WR238605 WITH A THIRTEEN WEEK RECOVERY PERIOD IN DOGS

Female Urinalysis Data (Week 4)

DOSE LEVEL (mg/kg/day)	ANIMAL NO.	APP	SG	COLOR	NIT	LEU	pН	PROT	GLU g/dl	KET	URO	BILI	BLOOD Ery/ul
	7541	CLEAR	1.087	DY	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7542	CLEAR	1.087	Y	NEG	NEG	5	NEG	NOR	NEG	NOR	NEG	NEG
	7549	HAZY	1.040	Y	NEG	NEG	5	TRACE	NOR	NEG	NOR	NEG	5-10
	7555	CLEAR	1.090	DY	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
0	7557	HAZY	1.068	Y	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	250
	7558	CLEAR	1.052	Y	NEG	++	9	NEG	NOR	NEG	NOR	NEG	5-10
	7566	CLEAR	1.054	Y	POS	+	7	TRACE	NOR	NEG	NOR	NEG	5-10
	7573	CLOUDY	1.060	Y	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	5-10
	7543	CLEAR	1,056	DY	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	5-10
	7545	CLEAR	1.018	PY	POS	NEG	6	NEG	NOR	NEG	NOR	NEG	NEG
	7550	CLEAR	1.050	Y	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
0.1	7552	•	1.081		NEG	NEG	5	TRACE	NOR	NEG	NOR	NEG	NEG
	7553	CLEAR	1.044	Y	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7560	HAZY	1.019	Y	NEG	+	6,	TRACE	NOR	NEG	NOR	NEG	5-10
	7567	CLOUDY	1.052	LY	POS	NEG	7	TRACE	NOR	NEG	NOR	NEG	250
	7569	CLEAR	1.052	Y	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7548	HAZY	1.042	AM	NEG	+	6	TRACE	NOR	NEG	NOR	NEG	5÷10
	7556	CLEAR	1.058	DY	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7561	HAZY	1.078	DY	NEG	NEG	6	NEG	NOR	NEG	NOR	NEG	5-10
	7562	HAZY	1.042	Y	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
2.0	7564	HAZY	1.090	Y	NEG	NEG	5	NEG	NOR	NEG	NOR	NEG	NEG
	7571	HAZY	1.052	DY	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	250
	7572	CLOUDY	1.030	Y	POS	+	6	NEG	NOR	NEG	NOR		50
	7574	CLEAR	1.064	DY	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7539	CLEAR	1.044	DY	NEG	TRACE	8	TRACE	NOR	NEG	NOR	NEG	5-10
	7540	HAZY	1.050	АМ	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7544	HAZY	1.040	DY	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7546	CLEAR	1.054	AM	POS	TRACE	6	TRACE	NOR	NEG	NOR	NEG	5-10
6.0	7551	CLOUDY	1.084	BR	POS	NEG	7	TRACE	NOR	NEG	NOR	NEG	250
	7554	HAZY	1.060	DY	NEG	NEG	7	TRACE	NOR	NEG	NOR	NEG	5-10
	7563	HAZY	1.069	AM	NEG	NEG	7	TRACE	NOR	NEG	NOR	NEG	NEG
	7568	CLOUDY	1.084	BR	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG

[&]quot;Inadvertently not collected.

Female Urinalysis Data (Week 4)

DRAFT

DOSE LEVEL (mg/kg/day)	ANIMAL NO.	CASTS	RBC	WBC		TRANS		CRYSTALS	BACTERIA '	SPERM	MUCUS
•	7541	1 FG	0	0	2	0	0	I+ TP	1+	0	0
	7542	2 HY	5	0	1	0	0	0	1+	0	0
	7549	2 HY 1 FG	10	5	6	0	0	I+ TP	1+	0	0
0	7555	1 FG 1 HY	19	0	2	0	0	I+ TP	1+	0	0
	7557	1 HY 2 FG	55	0	7	0	0	I+ TP	1+	0	0
	7558	1 HY	5	1	2	0	0	1+ TP	1+	0	0
	7566	4 HY	30	0	5	1	0	4+ TP	2+	0	0
	7573	0	1	0	1	0	0	2+ TP	1+	0	0
	7543	1 FG	7	0	9	0	0	1+ TP	1+	0	0
	7545*										
	7550	1 FG	20	0	2	1	0	0	1+	0	0
0,1	7552	0	0	0	1	4	0	0	1+	0	0
	7553	2 FG	0	0	2	0	0	0	1+	0	0
	7560	1 FG	10	î	3	3	0	0	1+	0	0
	7567	1 FG	50	0	3	5	0	1+ TP	1+	0	0
	7569	1 FG	5	0	1	0	0	0	1+	0	0
	7548	2 HY	20	1	2	3	0	0	1+	0	0
	7556	0	1	0	0	1	0	1+ TP	1+	0	0
	7561	1 FG	0	0	1	0	0	I+ TP	1+	0	0
2.0	7562	3 HY 2 FG	0	0	4	0	0	0	1+	0	0
	7564	0	0	0	0	0	0	0	1+	0	0
	7571	1 FG	0	0	5	0	0	I+ TP	1+	0	0
	7572	0	50	0	2	0	0	0	2+	0	0
	7574	1 HY	0	0	1	0	0	I+ TP	1+	0	0
_	7539	1 HY	3	0	3	0	0	I+ TP	1+	0	0
	7540	1 HY	0	0	3	0	0	I+ TP	1+	0	0
	7544	1 FG	11	0	0	1	0	0	1+	0	0
3.0	7546	1 HY 3 FG	1	0	3	2	0	0	1+	0	0
	7551	3 HY	1	0	6	0	0	2+ TP	1+	0	0
	7554	1 HY	10	0	2	0	0	2+ TP	1+	0	0
	7563	2 FG	2	1	3	0	0	I+ TP	1+	0	0
	7568	0	0	0	4	0	0	1+ TP	1+	0	0

^{&#}x27;Inadvertently not collected.

DRAFT

UIC/TRL Study No. 097

THIRTEEN WEEK ORAL TOXICITY STUDY OF WR238605 WITH A THIRTEEN WEEK RECOVERY PERIOD IN DOGS

Male Urinalysis Data (Week 8)

DOSE LEVEL (mg/kg/day)	ANIMAL NO.	APP	SG	COLOR	NIT	LEU	pН	PROT	GLU g/dl	КЕТ	URO	BILI	BLOOD Ery/ul
	7505	HAZY	1.068	DY	NEG	+	6	TRACE	NOR	NEG	NOR	NEG	5-10
	7512	HAZY	1.070	Y	NEG	++	6	+	NOR	NEG	NOR	NEG	NEG
	7515	HAZY	1.124	DY	NEG	++	5	TRACE	NOR	NEG	NOR	NEG	50
	7520	CLOUDY	1.052	Y	NEG	+	6	TRACE	NOR	NEG	NOR	NEG	5-10
0	7521	HAZY	1.022	DY	POS	++	7	TRACE	NOR	NEG	NOR	NEG	NEG
"	7531	HAZY	1.093	Y	NEG	+	6	TRACE	NOR	NEG	NOR	NEG	5-10
	7532	CLEAR	1.093	Y	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7533	CLEAR	1.060	PY	NEG	+	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7503	CLEAR	1.175	Y	NEG	++	7	++	NOR	NEG	NOR	NEG	NEG
	7517	HAZY	1.081	Y	NEG	++	5	TRACE	NOR	NEG	NOR	NEG	5-10
0.1	7519	HAZY	1.093	DY	NEG	++	7	++	NOR	NEG	NOR	NEG	NEG
	7523	HAZY	1.056	Y	NEG	++	6	TRACE	NOR	NEG	NOR	NEG	50
	7527	CLEAR	1.135	DY	NEG	NEG	5	NEG	NOR	NEG	NOR	NEG	NEG
	7528	CLEAR	1.078	Y	NEG	NEG	5	NEG	NOR	NEG	NOR	NEG	NEG
	7529	HAZY	1,140	Y	NEG	NEG	5	TRACE	NOR	NEG	NOR	NEG	NEG
	7536	HAZY	1.068	Y	POS	++	6	+	NOR	NEG	NOR	NEG	50
	7502	CLEAR	1.105	DY	NEG	NEG	7	TRACE	NOR	NEG	NOR	NEG	NEG
	7506	HAZY	1,105	DY	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	5-10
	7510	HAZY	1.081	Y	NEG	++	5	TRACE	NOR	NEG	NOR	NEG	5-10
	7514	CLEAR	1.056	LY	POS	+	6	+	NOR	NEG	NOR	NEG	NEG
2.0	7516	HAZY	1.084	Y	NEG	+	5	TRACE	NOR	NEG	NOR	NEG	50
	7522	HAZY	1.100	BR	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	50
	7538	CLEAR	1.081	DY	NEG	NEG	1	+	NOR	NEG	NOR	NEG	NEG
	7576	HAZY	1.060	Y	NEG	++	6	+	NOR	NEG	NOR	NEG	NEG
1	7507	HAZY	1,081	DY	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	5-10
	7508	HAZY	1.140	BR	NEG	+	5	TRACE	NOR	NEG	NOR	NEG	50
	7509	HAZY	1,096	Y	NEG	NEG	5	TRACE	NOR	NEG	NOR	NEG	5-10
	7511	HAZY	1.093	Y	NEG	++	6	TRACE	NOR	NEG	NOR	NEG	5-10
6.0	7518	HAZY	1.066	Y	NEG	+	5	TRACE	NOR	NEG	NOR	NEG	5-10
	7524	HAZY	1.096	DY	NEG	++	5	+	NOR	NEG	NOR	NEG	5-10
	7530	HAZY	1.072	Y	NEG	+	6	TRACE	NOR	NEG	NOR	NEG	5-10
<u> </u>	7535	HAZY	1.062	DY	NEG	++	5	TRACE	NOR	NEG	NOR	NEG	50

Male Urinalysis Data (Week 8)

DRAFT

DOSE LEVEL (mg/kg/day)	ANIMAL NO.	CASTS	RBC	WBC		THELIAL TRANS		CRYSTALS	BACTERIA	SPERM	MUCUS
	7505	2 HY	10	5	6	1	0	0	1+	1+	0
	7512	6 HY	0	5	2	1	0	1+ TP	1+	0	0
	7515	2 FG	5	20	1	0	0	1+ TP	1+	1+	0
	7520	5 HY	7	12	0	0	0	1+ TP	1+	1+	0
0	7521*	1 HY	0	5	1	0	0	2+ TP	1+	1+	0
	7531	2 HY 1 CG	5	10	1	0	0	1+ TP	1+	0	0
	7532	2 FG 4 HY	0	0	5	0	0	1+ TP	1+	1+	0
	7533	1 HCG 2 HY	0	25	1	2	0	0	1+	0	0
	7503	4 HY	0	5	2	0	0	2+ TP	1+	1+	0
	7517	5 HY	15	10	4	0	0	1+ TP	1+	0	0
	7519	3 HY 2 CG	0	100	4	0	0	1+ TP	1+	0	0
0.1	7523	2 HY 1 FG	20	24	3	0	0	1+ TP	2+	1+	0
	7527	2 HY	0	0	0	0	0	I+ TP	1+	o	0
	7528	1 FG 2 HY	3	0	1	1	0	1+ TP	1+	1+	0
	7529	1 FG 3 CG	0	0	0	0	0	1+ TP	1+	0	0
	7536	1 HY	20	5	1	0	0	1+ TP	2+	0	0
	7502	1 HY	0	0	1	0	0	l+ TP	1+	1+	0
	7506	2 HY 1 FG	30	2	4	0	0	I+ TP	1+	1+	0
	7510	1 FG	15	50	2	4	0	0	1+	2+	0
2.0	7514	1 FG	0	50	1	0	0	0	1+	1+	0
	7516	2 FG	150	20	4	3	0	I+ TP	1+	1+	0
	7522	2 CG 1 FG 1 HY	25	3	7	2	0	2+ TP	1+	0	0
	7538	1 HY	0	2	4	0	0	1+ TP	1+	1+	0
	7576	3 HY	10	100	7	2	0	1+ TP	1+	0	0
	7507	1 HY 2 FG	25	2	3	1	0	2+ TP	1+	1+	0
	7508	3 HY 1 FG	12	15	2	1	0	1+ TP	1+	1+	0
	7509	4 HY 4 FG	15	0	2	0	0	1+ TP	1+	1+	0
6.0	7511	1 HY 2 FG	10	30	2	0	0	1+ TP	1+	0	0
	7518	4 HY	12	15	4	1	0	0	1+	2++	0
	7524	1 FG 1 CG	10	20	2	0	o	l+ TP	1+	0	0
	7530	0	2	5	1	0	0	I+ TP	1+	2+	0
	7535	1 FG	15	50	3	1	0	0	1+	1+	0

DRAFT

UIC/TRL Study No. 097

THIRTEEN WEEK ORAL TOXICITY STUDY OF WR238605 WITH A THIRTEEN WEEK RECOVERY PERIOD IN DOGS

Female Urinalysis Data (Week 8)

DOSE LEVEL (mg/kg/day)	ANIMAL NO.	APP	SG	COLOR	NIT	LEU	pH	PROT	GLU g/d1	KET	URO	BILI	BLOOD Ery/ul
	7541	CLEAR	1.084	Y	NEG	NEG	5	2+	NOR	NEG	NOR	NEG	NEG
	7542	HAZY	1.087	DY	NEG	2+	5	TRACE	NOR	NEG	NOR	NEG	50
	7549	HAZY	1.084	DY	NEG	1+	6	1+	NOR	NEG	NOR	NEG	NEG
	7555	HAZY	1,084	Y	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	5-10
0	7557	HAZY	1.096	Y	NEG	2+	6	1+	NOR	NEG	NOR	NEG	50
	7558	HAZY	1.128	DY	NEG	2+	7	2+	NOR	NEG	NOR	NEG	NEG
	7566	CLOUDY	1.056	LY	NEG	2+	6	1+	NOR	NEG	NOR	NEG	NEG
	7573	HAZY	1.054	LY	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	5-10
	7543	CLEAR	1.128	Y	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7545	HAZY	1.056	Y	NEG	2+	6	2+	NOR	NEG	NOR	NEG	250
0.1	7550	HAZY	1.056	Y	POS	2+	5	TRACE	NOR	NEG	NOR	NEG	250
	7552	CLEAR	1.087	LY	NEG	TRACE	5	1+	NOR	NEG	NOR	NEG	NEG
	7553	HAZY	1.090	LY	NEG	NEG	7	TRACE	NOR	NEG	NOR	NEG	NEG
	7560	HAZY	1.060	Y	NEG	2+	6	1+	NOR	NEG	NOR	NEG	250
	7567	CLEAR	1.066	Y	POS	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7569	CLEAR	1.056	Y	NEG	NEG	6	1+	NOR	NEG	NOR	NEG	NEG
	7548	HAZY	1.068	DY	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7556	CLEAR	1.060	DY	POS	NEG	6	TRACE	NOR	NEG	NOR	NEG	5-10
	7561	HAZY	1.062	LY	POS	NEG	6	TRACE	NOR	NEG	NOR	NEG	5-10
	7562	HAZY	1.068	Y	NEG	TRACE	6	+	NOR	NEG	NOR	NEG	NEG
2.0	7564	CLEAR	1.090	Y	POS	NEG	5	NEG	NOR	NEG	NOR	NEG	NEG
	7571	HAZY	1.054	Y	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	50
	7572	HAZY	1.048	Y	POS	**	6	+	NOR	NEG	NOR	NEG	250
	7574	CLEAR	1.140	AM	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7539	HAZY	1.087	DY	NEG	NEG	8	+	NOR	NEG	NOR	NEG	NEG
	7540	HAZY	1.092	DY	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7544	CLEAR	1.057	DY	NEG	NEG	6	**	NOR	NEG	NOR	NEG	NEG
	7546	HAZY	1.100	BR	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7551	CLOUDY	1.116	BR	POS	+	6	+	NOR	NEG	NOR	NEG	NEG
6.0	7554	CLOUDY	1.075	DY	POS	٠	6	**	NOR	NEG	NOR	NEG	250
	7563	HAZY	1.124	DY	NEG	NEG	8	TRACE	NOR	NEG	NOR	NEG	NEG
	7568	HAZY	1.099	DY	POS	**	6	+	NOR	NEG	NOR	NEG	50



Female Urinalysis Data (Week 8)

DOSE LEVEL (mg/kg/day)	ANIMAL NO.	CASTS	RBC	WBC	E	PITHELIAI TRANS		CRYSTALS	BACTERIA	SPERM	MUCUS
	7541	2 HY	0	0	4	1	0	1+ TP	1+	0	0
	7542	2 HY 2 CG	10	5	3	0	0	1+ TP	2+	0	0
	7549	1 FG	0	5	6	1	0	2+ TP	1+	0	0
0	7555	2 HY 1 FG	10	0	7	2	0	2+ TP	1+	0	0
	7557	1 HY	10	16	3	0	0	0	1+	0	0
	7558	4 HY 1 CG	0	10	2	0	0	3+ TP	1+	0	0
	7566	1 HY 1 FG	0	50	30	3	0	0	1+	0	0
	7573	1 HY	3	0	0	0	0	0	2+	0	0
	7543	1 FG	0	0	1	1	0	1+ TP	1+	0	0
	7545	1 FG	50	25	4	0	0	0	1+	0	0
0.1	7550	I CG I HY	50	20	20	4	0	2+ TP	1+	0	0
	7552'	1 HY	0	1	1	0	0	1+ TP	1+	0	0
	7553	2 HY	0	10	7	0	0	2+ TP	1+	0	0
	7560	l HY	50	15	1	0	0	0	1+	0	0
	7567	1 HY 1 FG	2	2	3	10	0	I+ TP	1+	0	0
	7569	1 FG	0	0	1	0	0	2+ TP	1+	0	0
	7548	1 FG	0	0	1	2	0	1+ TP	1+	1+	0
	7556	1 HY	5	0	1	0	0	1+ TP	1+	0	0
	7561'	2 CG	5	0	1	0	0 -	0	1+	0	0
2.0	7562	2 HY 1 CG	0	5	2	1	0	2+ TP	1+	0	0
	7564	3 HY	0	0	1	0	0	0	1+	0	0
	7571	1 HY	10	0	2	0	0	1+ TP	1+	0	0
	7572	1 HY	15	10	1	0	0	1+ TP	3+	0	0
	7574	1 HY	0	0	1	0	0	1+ TP	1+	0	0
	7539*	1 HY	0	0	1	2	0	2+ TP	1+	0	0
	7540	1 HY 1 FG	0	0	4	2	0	0	1+	0	0
	7544	1 FG	0	0	0	0	0	0	Ĩ+	0	0
	7546	2 HY	0	0	2	0	0	I+ TP	Ĩ+	0	0
6.0	7551	4 CG	0	3	2	0	0	i+ TP	1+	0	0
	7554	1 HY	50	15	0	0	0	0	3+	0	0
	7563	2 CG 1 HY	0	0	2	0	0	I+ TP	1+	0	0
	7568	2 HY	20	15	100	10	0	I+ TP	1+	0	0

DRAFT

UIC/TRL Study No. 097

THIRTEEN WEEK ORAL TOXICITY STUDY OF WR238605 WITH A THIRTEEN WEEK RECOVERY PERIOD IN DOGS

Male Urinalysis Data (Week 13)

DOSE LEVEL (mg/kg/day)	ANIMAL NO.	АРР	SG	COLOR	NIT	LEU	pН	PROT	GLU g/dl	КЕТ	URO	BILI	BLOOD Ery/ul
	7505	CLOUDY	1.054	Y	POS	2+	6	1+	NOR	NEG	NOR	NEG	250
	7512	CLOUDY	1,078	Y	NEG	2+	6	TRACE	NOR	NEG	NOR	NEG	5-10
	7515	CLEAR	1.064	LY	NEG	2+	5	1+	NOR	NEG	NOR	NEG	NEG
	7520	CLEAR	1.032	LY	NEG	2+	6	1+	NOR	NEG	NOR	NEG	NEG
0	7521	CLEAR	1.003	CL	POS	2+	7	TRACE	NOR	NEG	NOR	NEG	50
	7531	CLEAR	1.087	Y	NEG	1+	6	TRACE	NOR	NEG	NOR	NEG	5-10
	7532	HAZY	1.052	Y	POS	2+	6	1+	NOR	NEG	NOR	NEG	5-10
	7533	CLEAR	1.068	LY	NEG	2+	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7503	HAZY	1.0485	Y	NEG	NEG	6	1+	NOR	NEG	NOR	NEG	250
	7517	HAZY	1.024	DY	NEG	2+	6	1+	NOR	NEG	NOR	NEG	NEG
	7519	CLEAR	1.032	LY	NEG	2+	6	TRACE	NOR	NEG	NOR	NEG	5-10
0.1	7523	CLEAR	1.081	Y	NEG	2+	6	2+	NOR	NEG	NOR	NEG	NEG
	7527	CLOUDY	1.062	Y	NEG	2+	6	TRACE	NOR	NEG	NOR	NEG	50
	7528	CLEAR	1.056	Y	NEG	2+	5	TRACE	NOR	NEG	NOR	NEG	NEG
	7529	CLEAR	1.087	DY	NEG	NEG	5	1+	NOR	NEG	NOR	NEG	NEG
	7536	CLEAR	1.062	Y	NEG	TRACE	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7502	CLOUDY	1.058	DY	NEG	TRACE	6	2+	NOR	NEG	NOR	NEG	NEG
	7506	CLEAR	1.070	DY	NEG	NEG	6	2+	NOR	NEG	NOR	NEG	NEG
	7510	CLEAR	1.060	Y	NEG	2+	6	2+	NOR	NEG	NOR	NEG	NEG
	7514	CLEAR	1.056	Y	NEG	2+	5	TRACE	NOR	NEG	NOR	NEG	5-10
2.0	7516	CLOUDY	1.051	DY	NEG	2+	6	TRACE	NOR	NEG	NOR	NEG	50
	7522	HAZY	1.096	AM	NEG	NEG	5	1+	NOR	NEG	NOR	NEG	NEG
	7538	CLOUDY	1.064	Y	POS	NEG	6	2+	NOR	NEG	NOR	NEG	NEG
	7576	CLEAR	1.022	Y	POS	2+	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7507	CLEAR	1.036	Y	POS	2+	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7508	CLOUDY	1.066	DY	POS	2+	6	2+	NOR	NEG	NOR	NEG	50
	7509	CLEAR	1.028	LY	POS	2+	6	TRACE	NOR	NEG	NOR	NEG	50
	7511	HAZY	1.064	DY	NEG	2+	5	1+	NOR	NEG	NOR	NEG	NEG
6.0	7518	HAZY	1.092	AM	POS	TRACE	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7524	CLEAR	1.063	AM	NEG	NEG	5	NEG	NOR	NEG	NOR	NEG	NEG
	7530	CLOUDY	1.064	LY	POS	2+	6	TRACE	NOR	NEG	NOR	2+	5-10
	7535	CLOUDY	1.060	DY	POS	2+	6	2+	NOR	NEG	NOR	NEG	5-10

DRAFT

Male Urinalysis Data (Week 13)

DOSE LEVEL (mg/kg/day)	ANIMAL NO.	CASTS	RBC	WBC		ITHELIAL TRANS	CELLS RENAL	CRYSTALS	BACTERIA	SPER M	MUCUS	YEAST CELLS
	7505	1 FR	100	20	1	0	0	0	1+	0	0	0
	7512	2 FG	5	15	6	0	0	3+ TP	1+	0	0	0
	7515	2 HY 1 FG	0	5	0	0	0	0	1+	0	0	0
0	7520	5 HY	6	20	5	0	0	0	1+	0	0	0
	7521	1 HY	15	10	1	0	0	0	1+	1+	0	0
	7531	1 FG	10	10	2	0	0	0	1+	1+	0	0
	7532	1 FG	0	3	2	0	0	1+ TP	1+	1+	0	0
	7533	3 HY	0	25	5	0	0	0	1+	0	0	0
	7503	2 HY	350	0	3	0	0	0	1+	1+	0	0
	7517	2 HY	0	10	2	0	0	0	1+	1+	0	0
	7519	2 FG	5	40	1	1	0	0	0	2+	0	0
	7523	1 CG	0	20	1	0	0	0	1+	2+	0	0
0.1	7527	2 HY	20	10	0	0	0	0	1+	0	0	0
	7528	2 HY	0	0	5	3	0	0	1+	2+	0	0
	7529	1 HY	0	0	3	0	0	1+ TP	1+	0	0	0
	7536	1 HY 1 FG	0	5	0	0	0	0	1+	1+	0	0
	7502	2 HY	0	0	3	0	0	3+ TP	1+	0	0	0
	7506	4 HY	1	3	1	0	0	0	1+	0	0	0
	7510	1 FG	0	50	3	0	0	0	1+	1+	0	0
	7514	2 FG	5	20	1	0	0	0	1+	1+	0	. 0
2.0	7516	2 FG	5	30	7	0	0	0	1+	0	0	0
	7522	4 HY	0	0	2	0	0	1+ TP	1+	1+	0	0
	7538	2 HY	0	0	3	0	0	1+ TP	1+	1+	0	0
	7576	1 FG	0	6	1	0	0	0	1+	0	0	0
	7507	2 HY	0	15	2	0	0	0	1+	0	0	0
	7508	1 HY	15	10	3	0	0	0	1+	0	0	0
	7509	1 FG	5	25	0	0	0	0	2+	0	0	0
	7511	2 HY	0	40	3	0	0	0	1+	1+	0	0
6.0	7518	0	0	0	1	1	0	0	1+	1+	0	0
	7524	1 FG	0	10	2	0	0	0	1+	1+	0	0
	7530	1 HY	5	15	0	0	0	1+ TP	1+	0	0	0
	7535	t HY	5	15	0	0	0	0	1+	0	0	0

DRAFT

UIC/TRL Study No. 097

THIRTEEN WEEK ORAL TOXICITY STUDY OF WR238605 WITH A THIRTEEN WEEK RECOVERY PERIOD IN DOGS

Female Urinalysis Data (Week 13)

DOSE LEVEL (mg/kg/day)	ANIMAL, NO.	APP	SG	COLOR	NIT	LEU	рН	PROT	GLU g/d1	KET	URO	BILI	BLOOD Ery/ul
	7541	HAZY	1.075	Y	NEG	TRACE	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7542	•	1.087	٠	POS	NEG	6	TRACE	NOR	NEG	NOR	NEG	250
	7549	CLEAR	1.056	LY	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	50
	7555	CLEAR	1.023	PY	POS	NEG	6	NEG	NOR	NEG	NOR	NEG	NEG
0	7557	CLEAR	1.078	DY	NEG	NEG	5	TRACE	NOR	NEG	NOR	NEG	NEG
	7558	CLEAR	1.050	Y	NEG	2+	6	1+	NOR	NEG	NOR	NEG	NEG
	7566	CLEAR	1.058	Y	NEG	2+	6	1+	NOR	NEG	NOR	NEG	NEG
	7573	CLOUDY	1.034	Y	POS	2+	7	1+	NOR	NEG	NOR	NEG	250
	7543	CLEAR	1.105	DY	NEG	NEG	6	1+	NOR	NEG	NOR	NEG	NEG
	7545	CLEAR	1.051	Y	NEG	1+	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7550	CLOUDY	1.069	Y	NEG	2+	5	1+	NOR	NEG	NOR	NEG	5-10
0.1	7552	CLEAR	1.072	Y	POS	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7553	CLEAR	1.087	DY	POS	NEG	5	2+	NOR	NEG	NOR	NEG	NEG
	7560	CLEAR	1.057	Y	NEG	NEG	8	2+	NOR	NEG	NOR	NEG	NEG
	7567	HAZY	1.081	Y	NEG	NEG	6	1+	NOR	NEG	NOR	NEG	NEG
	7569	CLEAR	1.032	LY	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7548	HAZY	1.060	DY	NEG	1+	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7556	CLEAR	1.056	DY	POS	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7561	CLEAR	1.028	PY	POS	1+	6	TRACE	NOR	NEG	NOR	NEG	5-10
	7562	CLEAR	1.042	Y	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
2.0	7564	CLEAR	1.084	DY	POS	NEG	5	1+	NOR	NEG	NOR	NEG	NEG
	7571	CLEAR	1.056	Y	POS	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7572	HAZY	1.064	AM	NEG	NEG	5	TRACE	NOR	NEG	NOR	NEG	50
	7574	HAZY	1.056	DY	NEG	2+	6	1+	NOR	NEG	NOR	NEG	NEG
	7539	CLEAR	1.062	DY	NEG	TRACE	6	1+	NOR	NEG	NOR	NEG	250
	7540	CLEAR	1.063	DY	NEG	NEG	5	1+	NOR	NEG	NOR	NEG	NEG
	7544	CLEAR	1.052	AM	NEG	NEG	6	1+	NOR	NEG	NOR	NEG	NEG
	7546	HAZY	1.084	AM	POS	TRACE	5	TRACE	NOR	NEG	NOR	NEG	5-10
6.0	7551	CLEAR	1.066	AM	NEG	NEG	6	2+	NOR	NEG	NOR	NEG	NEG
	7554	HAZY	1.084	BR	NEG	NEG	6	3+	NOR	NEG	NOR	NEG	NEG
-	7563	HAZY	1.048	BR	NEG	TRACE	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7568	HAZY	1.045	DY	NEG	NEG	6	2+	NOR	NEG	NOR	NEG	NEG

^{*}Inadvertently not collected.

Female Urinalysis Data (Week 13)

DOSE LEVEL (mg/kg/day)	ANIMAL NO.	CASTS	RBC	WBC		THELIAL TRANS		CRYSTALS	BACTERIA	SPERM	MUCUS
	7541	1 HY	0	0	5	0	0	1+ TP	1+	0	0
	7542'	1 HY 1 FG	10	0	0	0	0	1+ TP	1+	0	0
	7549	1 CG	15	0	10	0	0	0	1+	0	0
. 0	7555	1 HY	0	3	1	0	o	0	1+	0	0
	7557	1 HY	0	0	3	0	0	1+ TP	1+	0	0
	7558	0	0	15	25	0	0	1+ TP	1+	0	0
	7566	3 FG	0	50	23	6	0	0	1+	0	0
	7573	1 HY	15	10	0	0	0	0	3+	0	0
	7543	0	0	0	1	0	0	2+ TP	1+	0	0
	7545	1 HY	0	7	9	0	0	2+ TP	1+	0	0
	7550	1 FG	10	22	3	0	0	0	1+	o	0
0,1	7552	1 FG 2 HY	0	0	4	1	0	0	1+	0	0
	7553	2 HY	0	0	0	0	0	0	1+	0	0
	7560	1 HY	0	0	1	0	0	1+ TP	1+	0	0
	7567	2 FG	0	0	5	0	0	1+ TP	1+	0	0
	7569	1 FG 1 HY	0	0	3	0	0	0	1+	0	0
	7548	1 HY	0	10	5	0	0	3+ TP	1+	0	0
	7556	1 HY	0	0	4	0	0	1+ TP	1+	0	0
	7561	0	5	2	1	0	0	0	1+	0	0
	7562	2 CG	0	0	4	0	0	1+ TP	1+	0	0
2.0	7564	2 HY	0	0	3	0	0	0	2+	0	0
	7571	2 HY 1 CG	0	0	1	1	0	0	1+	0	0
	7572	3 HY	10	0	5	0	0	0	1+	0	o
	7574	1 HY	0	50	10	0	0	1+ TP	1+	0	0
	7539	3 HY	30	5	25	0	0	1+ TP	1+	0	0
	7540	3 HY 1 FG	0	0	3	0	0	0	1+	0	0
	7544	3 FG	0	0	6	0	0	0	1+	0	0
g/mi	7546	2 HY	0	7	3	0	0	1+ TP	1+	0	0
6.0	7551	2 FG	0	0	5	0	0	0	I+	0	0
	7554	0	0	0	1	0	0	2+ TP	1+	0	0
	7563	1 HY 2 FG	0	5	3	0	0	0	1+	0	0
	7568	2 FG 1 CG	0	0	12	0	0	2+ TP	1+	0	0

DRAFT

UIC/TRL Study No. 097

THIRTEEN WEEK ORAL TOXICITY STUDY OF WR238605 WITH A THIRTEEN WEEK RECOVERY PERIOD IN DOGS

Male Urinalysis Data (Week 18)

DOSE LEVEL (mg/kg/day)	ANIMAL NO.	APP	SG	COLOR	NIT	LEU	рН	PROT	GLU g/dl	KET	URO	BILI	BLOOD Ery/ul
	7512	CLOUDY	1.060	DY	NEG	2+	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7515	HAZY	1.084	DY	NEG	TRACE	6	TRACE	NOR	NEG	NOR	NEG	5-10
0	7531	CLOUDY	1.084	DY	NEG	1+	6	NEG	NOR	NEG	NOR	NEG	5-10
	7532	HAZY	1.066	LY	NEG	TRACE	6	NEG	NOR	NEG	NOR	NEG	NEG
	7519	CLEAR	1.050	Y	NEG	1+	6	NEG	NOR	NEG	NOR	NEG	5-10
0.1	7527	CLEAR	1.104	Y	NEG	2+	5	TRACE	NOR	NEG	NOR	NEG	5-10
	7529	TURBID	1.072	DY	NEG	2+	6	TRACE	NOR	NEG	NOR	NEG	5-10
	7536	CLEAR	1.078	Y	NEG	1+	6	NEG	NOR	NEG	NOR	NEG	5-10
	7510	HAZY	1.084	Y	NEG	2+	5	1+	NOR	NEG	NOR	NEG	5-10
	7516	CLOUDY	1.100	BR	NEG	TRACE	6	TRACE	NOR	NEG	NOR	NEG	5-10
2.0	7522	CLEAR	1.105	DY	NEG	2+	6	NEG	NOR	NEG	NOR	NEG	5-10
	7538	CLEAR	1.078	Y	POS	TRACE	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7507	CLOUDY	1.093	DY	NEG	2+	6	TRACE	NOR	NEG	NOR	NEG	5-10
	7511	TURBID	1.090	DY	POS	1+	6	1+	NOR	NEG	NOR	NEG	50
6.0	7530	TURBID	1.062	DY	POS	2+	6	TRACE	NOR	NEG	NOR	NEG	250
	7535	TURBID	1.087	DY	POS	2+	6	TRACE	NOR	NEG	NOR	NEG	5-10

Male Urinalysis Data (Week 18)



DOSE LEVEL (mg/kg/day)	ANIMAL NO.	CASTS	RBC	WBC		ITHELIAL TRANS		CRYSTALS	BACTERIA	SPERM	MUCUS
	7512	3 FG 2 HY	0	14	1	0	0	I+ TP	1+	1+	0
0	7515	I HY I FG	12	5	4	0	0	I+ TP	0	1+	0
	7531	2 HY	20	23	1	0	0	1+ TP	1+	0	0
	7532	1 HY	0	5	2	0	0	1+ TP	1+	0	0
	7519	1 FG 1 HY	12	10	2	0	0	I+ TP	2+	0	0
0.1	7527	1 FG 1 HY	3	15	I	0	0	2+ TP	1+	1+	0
	7529	2 FG 4 HY	9	30	5	0	0	0	1+	0	0
	7536	3 FG 1 CG	10	20	1	0	0	0	1+	1+	0
	7510	I FG I HY	22	100	13	0	0	0	1+	1+	0
2.0	7516	1 FG	10	0	4	0	0	2+ TP	1+	0	0
	7522	1 FG	10	15	2	0	0	2+ TP	1+	1+	0
	7538	1 HY 1 FG	0	3	2	0	0	1+ TP	1+	1+	0
	7507	1 HY 2 FG	5	14	0	0	0	I+ TP	1+	0	0
6.0	7511	3 FG	40	10	0	0	0	I+ TP	1+	0	0
	7530	1 HY	15	10	1	0	0	0	2+	0	0
	7535	4 HY	15	25	1	0	0	I+ TP	1+	1+	0

DRAFT

UIC/TRL Study No. 097

THIRTEEN WEEK ORAL TOXICITY STUDY OF WR238605 WITH A THIRTEEN WEEK RECOVERY PERIOD IN DOGS

Female Urinalysis Data (Week 18)

DOSE LEVEL (mg/kg/day)	ANIMAL NO.	APP	SG	COLOR	NIT	LEU	рН	PROT	gLU g/dl	KET	URO	BILI	BLOOD Ery/ul
	7541	HAZY	1.100	•	NEG	NEG	6	NEG	NOR	NEG	NOR	NEG	NEG
	7549	CLEAR	1.062	DY	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
0	7557	CLEAR	1.116	LY	NEG	NEG	5	1+	NOR	NEG	NOR	NEG	NEG
	7566	CLEAR	1,066	Y	NEG	2+	6	NEG	NOR	NEG	NOR	NEG	NEG
	7543	CLEAR	1.108	DY	NEG	NEG	6	NEG	NOR	NEG	NOR	NEG	NEG
0.1	7545	CLEAR	1.048	DY	NEG	NEG	7	NEG	NOR	NEG	NOR	NEG	NEG
	7552	CLOUDY	1.090	DY	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	250
	7553	CLEAR	1.081	DY	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7548	TURBID	1.072	DY	NEG	NEG	6	NEG	NOR	NEG	NOR	NEG	NEG
	7561	CLOUDY	1.090	AM	NEG	2+	6	TRACE	NOR	NEG	NOR	NEG	250
2.0	7562	CLEAR	1.090	DY	NEG	NEG	8	NEG	NOR	NEG	NOR	NEG	NEG
	7571	TURBID	1.062	DY	NEG	2+	6	2+	NOR	NEG	NOR	NEG	50
	7539	TURBID	1.128	Y	NEG	NEG	6	NEG	NOR	NEG	NOR	NEG	NEG
	7540	CLEAR	1.026	Y	NEG	1+	6	NEG	NOR	NEG	NOR	NEG	5-10
6.0	7554	CLEAR	1.034	Y	NEG	TRACE	6	NEG	NOR	NEG	NOR	NEG	NEG
	7563	CLEAR	1.124	Y	NEG	2+	7	TRACE	NOR	NEG	NOR	NEG	NEG

^{&#}x27;Inadvertently not collected.

Female Urinalysis Data (Week 18)

DRAFT

DOSE LEVEL (mg/kg/day)	ANIMAL NO.	CASTS	RBC	WBC	2000	ITHELIAL TRANS	1 1000	CRYSTALS	BACTERIA	SPERM	MUCUS
	7541	1 HY	0	0	6	0	0	2+ TP	1+	0	0
0	7549	2 HY 1 FG	0	0	6	1	0	0	1+	o	0
	7557	1 FG	2	1	3	0	0	1+ TP	1+	0	0
	7566'	1 HY	0	14	20	0	0	3+ TP	1+	0	0
	7543	1 HY	0	0	4	1	0	1+ TP	1+	0	0
	7545*	1 HY	0	0	3	0	0	I+ TP	2+	0	0
0.1	7552	3 HY	25	0	1	0	0	0	1+	0	0
	7553	2 HY	0	0	2	0	0	0	1+	0	0
	7548	2 HY	0	5	3	0	0	2+ TP	1+	0	0
	7561	0	10	15	0	0	0	I+ TP	2+	0	0
2.0	7562	1 FG	0	0	4	0	0	1+ TP	1+	0	0
	7571	1 HY	15	20	1	0	0	1+ TP	2+	0	0
	7539	1 HY	0	0	1	0	0	1+ TP	1+	0	0
	7540	2 HY	10	10	2	0	0	I+ TP	2+	0	0
6.0	7554	1 FG	0	10	4	0	0	1+ TP	1+	0	0
	7563	1 HY	0	12	1	0	0	1+ TP	1+	0	0

^{&#}x27; Animal also had Yeast cells

Male Urinalysis Data (Week 26)



DOSE LEVEL (mg/kg/day)	ANIMAL NO.	APP	SG	COLOR	NIT	LEU	рН	PROT	GLU g/dl	KET	URO	BILI	BLOOD Ery/ul
	7512	HAZY	1.132	DY	POS	2+	6	1+	NOR	NEG	NOR	NEG	NEG
	7515	CLEAR	1.063	Y	POS	2+	6	1+	NOR	NEG	NOR	NEG	NEG
0	7531	HAZY	1.072	DY	NEG	NEG	6	1+	NOR	NEG	NOR	NEG	NEG
	7532	CLEAR	1.069	Y	POS	NEG	8	1+	NOR	NEG	NOR	NEG	NEG
	7519	HAZY	1.060	Y	NEG	1+	6	1+	NOR	NEG	NOR	2+	50
	7527	HAZY	1.075	DY	POS	2+	6	1+	NOR	NEG	NOR	NEG	50
0.1	7529	CLEAR	1.014	PY	POS	1+	8	1+	NOR	NEG	NOR	NEG	5-10
	7536	HAZY	1.075	Y	NEG	2+	5	TRACE	NOR	NEG	NOR	NEG	NEG
	7510	HAZY	1.075	Y	NEG	2+	5	1+	NOR	NEG	NOR	NEG	NEG
	7516	CLEAR	1.078	Y	POS	NEG	6	TRACE	NOR	NEG	1+	NEG	NEG
2.0	7522	HAZY	1.165	A	POS	1+	8	1+	NOR	NEG	NOR	NEG	NEG
	7538	HAZY	1.066	DY	POS	NEG	6	2+	NOR	NEG	NOR	NEG	NEG
	7507	CLOUDY	1.062	LY	POS	1+	6	TRACE	NOR	NEG	NOR	NEG	5-10
	7511	CLEAR	1.046	Y	NEG	2+	6	TRACE	NOR	NEG	NOR	NEG	NEG
6.0	7530	HAZY	1.046	LY	POS	2+	6	TRACE	NOR	NEG	NOR	NEG	50
	7535	CLEAR	1.084	DY	POS	2+	7	2+	NOR	NEG	NOR	NEG	NEG

Male Urinalysis Data (Week 26)



DOSE LEVEL (mg/kg/day)	ANIMAL NO.	CASTS	RBC	WBC		THELIAL TRANS	CELLS RENAL	CRYSTALS	BACTERIA	SPERM	MUCUS
	7512	2 HY	0	10	3	0	0	1+ TP	1+	1+	0
0	7515	3 HY 2 FG	0	25	0	0	0	1+ TP	1+	1+	0
	7531	1 FG	0	0	2	3	0	4+ TP	1+	1+	0
	7532	1 FG	0	0	2	0	0	1+ TP	2+	1+	0
	7519	I HY I FG	5	15	1	1	0	1+ TP	1+	1+	0
0.1	7527	1 FG 2 HY	15	52	1	0	0	2+ TP	1+	0	0
	7529	1 HY	12	5	2	0	0	0	2+	0	0
	7536	2 FG 1 HY	0	23	2	7	0	0	1+	2+	0
	7510	4 HY	0	20	2	0	0	0	1+	3+	0
2.0	7516	1 CG 1 HY	0	0	6	0	0	1+ TP	1+	1+	0
	7522	2 HY	0	10	5	4	0	2+ TP	1+	0	0
	7538	2 FG	0	0	1	0	0	3+ TP	2+	3+	0
	7507	1 HY	0	8	1	0	0	1+ TP	4+	0	0
6.0	7511	1 WC 1 FG	0	50	4	2	0	0	1+	1+	0
	7530	1 HY	5	15	1	0	0	1+ TP	4+	0	0
	7535	з нү	0	10	3	0	0	0	1+	2+	0



UIC/TRL Study No. 097

THIRTEEN WEEK ORAL TOXICITY STUDY OF WR238605 WITH A THIRTEEN WEEK RECOVERY PERIOD IN DOGS

Female Urinalysis Data (Week 26)

DOSE LEVEL (mg/kg/day)	ANIMAL NO.	APP	sg	COLOR	NIT	LEU	рН	PROT	GLU g/dl	КЕТ	URO	BILI	BLOOD Ery/ul
	7541	HAZY	1.078	Y	POS	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7549	CLEAR	1.072	DY	POS	NEG	7	TRACE	NOR	NEG	NOR	NEG	NEG
0	7557	CLEAR	1.075	Y	POS	2+	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7566	CLEAR	1.081	Y	POS	1+	6	1+	NOR	NEG	NOR	NEG	NEG
	7543	CLEAR	1.081	Y	POS	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
0.1	7545	CLEAR	1.034	PY	NEG	TRACE	6	1+	NOR	NEG	NOR	NEG	NEG
	7552	CLEAR	1.090	Y	POS	NEG	6	1+	NOR	NEG	NOR	NEG	NEG
	7553	CLEAR	1.064	Y	POS	NEG	6	TRACE	NOR	NEG	NOR	NEG	NEG
	7548	HAZY	1.060	Y	POS	1+	8	2+	NOR	NEG	NOR	NEG	NEG
	7561	CLEAR	1.102	DY	POS	NEG	9	2+	NOR	NEG	NOR	NEG	NEG
2.0	7562	CLEAR	1.036	LY	NEG	TRACE	6	1+	NOR	NEG	NOR	NEG	NEG
	7571	HAZY	1.060	Y	POS	TRACE	6	1+	NOR	NEG	NOR	NEG	NEG
	7539	HAZY	1.078	DY	NEG	NEG	7	1+	NOR	NEG	NOR	NEG	NEG
	7540	CLEAR	1.063	Y	NEG	NEG	6	TRACE	NOR	NEG	NOR	NEG	5-10
6.0	7554	CLEAR	1.060	Y	POS	TRACE	6	1+	NOR	NEG	NOR	NEG	250
	7563	HAZY	1.075	Y	POS	2+	7	2+	NOR	NEG	NOR	NEG	5-10

Female Urinalysis Data (Week 26)



DOSE LEVEL (mg/kg/day)	ANIMAL NO.	CASTS	RBC	WBC		THELIAL TRANS	CELLS RENAL	CRYSTALS	BACTERIA	SPERM	MUCUS
	7541	2 FG 4 HY	0	0	3	2	0	0	1+	0	0
	7549	1 HY	0	0	2	0	0	I+ TP	2+	1+	0
0	7557	l HY l FG	0	7	3	12	0	0	1+	0	0
	7566	1 HY 1 FG	0	50	13	0	0	2+ TP	1+	0	0
	7543	1 FG	0	0	3	1	0	1+ TP	1+	0	0
0.1	7545	1 CG 1 FG	3	2	5	1	0	0	1+	0	0
	7552	1 FG	0	0	5	4	0	0	1+	0	0
	7553	1 HY	0	0	5	0	0	I+ TP	1+	0	0
	7548	5 HY 2 FG	0	100	8	0	0	1+ TP	1+	0	0
	7561	1 HY	0	0	1	0	0	2+ TP	1+	0	0
2.0	7562	3 HY 2 FG	0	3	4	2	0	0	1+	0	0
	7564	5 HY 1 CG	0	0	1	4	0	0	1+	0	0
	7539	0	0	0	2	3	0	1+ TP	1+	0	0
6.0	7540	4 HY 1 FG	10	0	12	3	0	1+ TP	1+	0	0
	7554	2 FG 1 HY	150	4	3	0	0	0	1+	1+	0
	7563	ı HY	0	250	4	1	0	1+ TP	1+	0	0

APPENDIX 9

Cardiology Report

m/m/

September 14, 1993

TO: Barry S. Levine, D.Sc.

Director

Toxicology Research Laboratory (M/C 868)

The University of Illinois 1940 W. Taylor St. Chicago, IL 60612-7353

FROM: Robert Hamlin, D.V.M., Ph.D.

Diplomate ACVIM (Cardiology/Internal Medicine)

1520 Grenoble Rd. Columbus, OH 43221

RE: ECG Analysis of Records from Beagles on Study No. 097 during the Pretest Period, in

Week 13 (Last Week of Treatment), and in Week 26 (Last Week of Recovery Period)

All records are of good quality. At Week 13, one high dose male demonstrated a changed t-wave whereas a possible atrial premature beat was observed for a high dose female. These mild changes were not apparent in any other animals and were considered incidental findings. Although within normal limits, a number of drug-treated dogs showed other apparent T-wave alterations (increased amplitude in both a positive and negative direction when compared to the pretest recording) and alterations of ST (J-point) segments. These were typically seen at the end of the recovery period as opposed to during Week 13. As such, they were considered incidental findings. Other changes which were also considered within normal limits included a possible secondary atrial ventricular block for a high dose female (no. 7568) in Week 13, and for a high dose male (no. 7511) at the end of the recovery period, which was not seen in the Week 13 observation period.

The quantitative analysis of heart rate, PQ interval and QT duration showed no differences among the various groups.

Thus, at the doses administered and under the conditions of this study, the test compound produced no systematic changes in the electrocardiograms.

ORAF T

Electrocardiogram diagnosis

Dose	Sex	Animal Number	Pretest	Week 13	Week 26
	М	7505 7512 7515 7520 7521 7531 7532 7533	WNL	WNL WNL WNL WNL WNL WNL WNL WNL WNL	WNL WNL - WNL WNL
0	F	7541 7542 7549 7555 7557 7558 7566 7573	WNL RAD WNL WNL WNL LAD RAD WNL	WNL WNL (iRBBB) WNL WNL WNL PWNL (RVE) WNL WNL	WNL WNL WNL WNL
	м	7503 7517 7519 7523 7527 7528 7529 7536	WNL WNL (LAD) WNL	WNL LTW LTW WNL WNL WNL WNL WNL	- WNL WNL WNL WNL
0.1	F	7543 7545 7550 7552 7553 7560 7567 7569	WNL WNL WNL PWNL (RVE) WNL (LAD) WNL (LAD) WNL WNL WNL	WNL WNL WNL (LAD) WNL WNL WNL WNL WNL WNL WNL	WNL WNL - WNL/NC (iRBBB) WNL/NC (LAD)
2.0	М	7502 7506 7510 7514 7516 7522 7538 7576	WNL	WNL WNL WNL (IRBBB) WNL WNL WNL WNL WNL WNL	WNL WNL WNL WNL WNL WNL
	1.1	7548 7556 7561 7562 7564 7571 7572 7574	WNL WNL PWNL (RVE/LAD) WNL WNL WNL WNL WNL WNL WNL WNL	WNL WNL LAD (NCP) WNL WNL WNL WNL WNL WNL WNL	WNL (LTWDPT) WNL (LAD/LTWDPT) WNL WNL
6.0	7574 7507 7508 M 7509 7511 7518 7524 7530		WNL (RAD) WNL WNL WNL WNL WNL WNL WNL WNL WNL	WNL WNL WNL WNL WNL WNL WNL WNL	WNL - WNL (P2°AVB/LTWDPT) WNL (JPDDPT) WNL
			WNL WNL WNL WNL WNL	WNL (TWDPT) WNL WNL WNL PAPB WNL WNL WNL WNL	WNL WNL (TWDPT) - WNL (TWDPT) WNL (TWDPT)

	= Right Ventricle Enlarged	Dose	= mg base/kg/day
	= Probably within normal limits	NCP	= No change from pretest
-	= Animal previously sacrificed	NC	= No change
	= Large T-waves different from pretest	LAD	= Left axis deviation
iRBBB	= Incomplete right bundle branch block	WNL	= Within normal limits
	= J point depression different from pretest	RAD	= Right axis deviation
P2°AVB	= Possible secondary atrial ventricular block	LTW	= Large T-wave
	= Possible atrial premature beat	JPD	= J-point depression
TWDPT	= T-waves different from pretest	CIW	= Changed T-wave



SUMMARY REPORT TEST: PR INTERVAL

STUDY ID: 097

STUDY NO: 097ECG

ABBR: PR

UNITS: sec

ADDR. FR							ON112: 21	
	ANALYSIS OF	VARIANCE	FOLLOWED BY	DUNNETT'S	PROCEDURE			
	GROUP(s):	0	0.1	2.0	6.0	mg	base/kg/day	
	Period: Pr	etest						
	MEAN	0.101	0.113	0.105	0.106			
	SO	0.0121	0.0221	0.0140	0.0176			
	N	8	8	8	8			
	Period: We	ek 13						
	MEAN	0.100	0.109	0.099	0.098			
	SD	0.0151	0.0123	0.0072	0.0072			
	N	8	8	8	8			
	Period: We	ek 26						
	MEAN	0.101	0.109	0.099	0.103			
	SD	0.0082	0.0214	0.0131	0.0125			



SUMMARY REPORT TEST: PR INTERVAL

STUDY ID: 097 STUDY NO: 097ECG SEX: FEMALE

UNITS: sec

ABBR: PR

ANALYSIS	OF	VARIANCE	FOLLOWED BY	DUNNETT'S	PROCEDURE			
GROUP(s):		0	0.1	2.0	6.0	mg	base/kg/day	
Period:	Pre	test						
MEAN		0.105	0.107	0.107	0.110			
SD		0.0139	0.0074	0.0125	0.0142			
N		8	8	8	8			
Period:	Wee	k 13						
MEAN		0.110	0.109	0.102	0.105			
SD		0.0161	0.0040	0.0050	0.0121			
N		8	8	8	8			
Period:	Wee	k 26						
MEAN		0.121	0.104	0.108	0.106			
SD		0.0143	0.0206	0.0073	0.0161			
N		4	4	4	4			



SUMMARY REPORT TEST: QT INTERVAL

STUDY ID: 097 STUDY NO: 097ECG

SEX: MALE

ABBR: QT

UNITS: sec

ANALYSIS	OF	VARIANCE	FOLLOWED	BY	DUNNETT'S	PROCEDURE

ANALYSIS	OF VARIANCE	FOLLOWED BY	DUNNETT'S	PROCEDURE	
GROUP(s):	0	0.1	2.0	6.0	mg base/kg/day
Period:	Pretest				
MEAN	0.198	0.201	0.197	0.188	
SD	0.0163	0.0165	0.0094	0.0247	
N	8	8	8	8	
Period:	Week 13				
MEAN	0.186	0.192	0.191	0.187	
SD	0.0123	0.0142	0.0206	0.0112	
N	8	8	8	8	
Period: 1	Week 26				
MEAN	0.180	0.180	0.184	0.185	
SD	0.0150	0.0114	0.0047	0.0099	
N	4	4	4	4	



SUMMARY REPORT TEST: QT INTERVAL

STUDY ID: 097

SEX: FEMALE

STUDY	NO:	097ECG
	OT	

ABBR: QT							UNITS: se	C
	ANALYSIS O	F VARIANCE F	OLLOWED BY	DUNNETT'S	PROCEDURE			
	GROUP(s):	0	0.1	2.0	6.0	mg	base/kg/day	
	Period: Pr	etest						
	MEAN	0.202	0.202	0.190	0.212			
	SD	0.0180	0.0164	0.0140	0.0113			
	N	8	8	8	8			
	Period: We	ek 13						
	MEAN		0.185	0.193	0.185			
	SD	0.0234	0.0137	0.0178	0.0086			
	N	8	8	8	8			
	Period: We	ek 26						
	MEAN	0.183	0.180	0.196	0.203			
	SD	0.0089	0.0106	0.0296	0.0225			
	N	4	4	4	4			



SUMMARY REPORT TEST: Heart Rate

STUDY ID:	097						SEX: MALE
STUDY NO:	097ECG						
ABBR: HR							UNITS: bpm
		ANALYSIS	OF VARIANCE	FOLLOWED BY	DUNNETT'S	PROCEDURE	
		GROUP(s):	0	0.1	2.0	6.0	mg base/kg/day
		Period:	Pretest				
		MEAN	127	132	129	143	
		SD	17.3	18.0	9.5	19.8	
		N	8	8	8	8	
		Period:	Week 13				
		MEAN	129	127	127	137	
		SD	28.8	23.5	20.7	23.4	
		N	8	8	8	8	
		Period:	Week 26				
		MEAN	133	142	145	128	
		SD	20.8	17.9	12.7	15.8	



SUMMARY REPORT TEST: Heart Rate

STUDY ID: 097

SEX: FEMALE

STUDY NO: 097ECG						SEAT PERSON	
ABBR: HR						UNITS: bpm	
	ANALYSIS OF	VARIANCE FO	LLOWED BY D	UNNETT'S PR	OCEDURE		
	CDOVIDAGA.	0	0.1	2.0	4.0	1, 1, 1, 1	
	GROUP(s):		0.1	2.0	6.0	mg base/kg/day	
	Period: Pre	test					
	MEAN	125	133	130	123		
	SD	23.8	11.6	8.9	23.5		
	N	8	8	8	8		
	Period: Wee	k 13					
	MEAN	128	126	128	121		
	SD	19.1	19.5	31.0	16.3		
	N	8	8	8	8		
	Period: Wee	k 26					
	MEAN	134	132	118	140		
	SD	41.3	10.5	19.7	21.5		
	N	4	4	4	4		



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: PR INTERVAL

STUDY ID: 097 STUDY NO: 097ECG SEX: MALE

STUDY NO: 097ECG ABBR: PR					UNITS: sec
	ANIMAL I	Pretest	Week 13	Week 26	•••••
	GROUP: 1	-M:0 mg base/k	g/day		
	7531	0.096	0.094	0.108	
	7532	0.104	0.100	0.096	
	7512	0.092	0.084	0.092	
	7515	0.104	0.116	0.108	
	7521	0.110	0.112		
	7533	0.104	0.118		
	7520	0.078	0.076		
	7505	0.118	0.096		
	MEAN	0.101	0.100	0.101	
	SD	0.0121	0.0151	0.0082	
	N	8	8	4	
	GROUP: 2	·M:0.1 mg base	e/kg/day		
	7527	0.102	0.124	0.096	
	7519	0.096	0.098	0.090	
	7529	0.106	0.106	0.110	
	7536	0.166	0.128	0.138	
	7503	0.110	0.102		
	7523	0.106	0.102		
	7517	0.104	0.114		
	7528	0.110	0.094		
	MEAN	0.113	0.109	0.109	
*	SD	0.0221	0.0123	0.0214	
	N	8	8	4	

INDIVIDUAL ANIMAL REPORT BY GROUP TEST: PR INTERVAL

STUDY ID: 097

STUDY NO: 097ECG ABBR: PR ANIMAL ID Pretest Week 13 Week 26 GROUP: 3-M:2.0 mg base/kg/day 7538 0.078 0.090 0.080 7516 0.120 0.102 0.110 7522 0.112 0.098 0.102 7510 0.108 0.092 0.104 7576 0.120 0.112 7506 0.106 0.094 7502 0.096 0.104 7514 0.098 0.100 MEAN 0.105 0.099 0.099 SD 0.0140 0.0072 0.0131 N 8 8 4 GROUP: 4-M:6.0 mg base/kg/day 7535 0.078 0.098 0.088 7511 0.102 0.100 0.106 7530 0.104 0.106 0.100	sec
GROUP: 3-M:2.0 mg base/kg/day 7538	
7538	
7516 0.120 0.102 0.110 7522 0.112 0.098 0.102 7510 0.108 0.092 0.104 7576 0.120 0.112 7506 0.106 0.094 7502 0.096 0.104 7514 0.098 0.100 MEAN 0.105 0.099 0.099 SD 0.0140 0.0072 0.0131 N 8 8 4 GROUP: 4-M:6.0 mg base/kg/day 7535 0.078 0.098 0.088 7511 0.102 0.100 0.106	
7516 0.120 0.102 0.110 7522 0.112 0.098 0.102 7510 0.108 0.092 0.104 7576 0.120 0.112 7506 0.106 0.094 7502 0.096 0.104 7514 0.098 0.100 MEAN 0.105 0.099 0.099 SD 0.0140 0.0072 0.0131 N 8 8 4 GROUP: 4-M:6.0 mg base/kg/day 7535 0.078 0.098 0.088 7511 0.102 0.100 0.106	
7522 0.112 0.098 0.102 7510 0.108 0.092 0.104 7576 0.120 0.112 7506 0.106 0.094 7502 0.096 0.104 7514 0.098 0.100 MEAN 0.105 0.099 0.099 SD 0.0140 0.0072 0.0131 N 8 8 4 GROUP: 4-M:6.0 mg base/kg/day 7535 0.078 0.098 0.088 7511 0.102 0.100 0.106	
7576 0.120 0.112 7506 0.106 0.094 7502 0.096 0.104 7514 0.098 0.100 MEAN 0.105 0.099 0.099 SD 0.0140 0.0072 0.0131 N 8 8 4 GROUP: 4-M:6.0 mg base/kg/day 7535 0.078 0.098 0.088 7511 0.102 0.100 0.106	
7506 0.106 0.094 7502 0.096 0.104 7514 0.098 0.100 MEAN 0.105 0.099 0.099 SD 0.0140 0.0072 0.0131 N 8 8 4 GROUP: 4-M:6.0 mg base/kg/day 7535 0.078 0.098 0.088 7511 0.102 0.100 0.106	
7502 0.096 0.104 7514 0.098 0.100 MEAN 0.105 0.099 0.099 SD 0.0140 0.0072 0.0131 N 8 8 4 GROUP: 4-M:6.0 mg base/kg/day 7535 0.078 0.098 0.088 7511 0.102 0.100 0.106	
7514 0.098 0.100 MEAN 0.105 0.099 0.099 SD 0.0140 0.0072 0.0131 N 8 8 4 GROUP: 4-M:6.0 mg base/kg/day 7535 0.078 0.098 0.088 7511 0.102 0.100 0.106	
MEAN 0.105 0.099 0.099 SD 0.0140 0.0072 0.0131 N 8 8 4 GROUP: 4-M:6.0 mg base/kg/day 7535 0.078 0.098 0.088 7511 0.102 0.100 0.106	
SD 0.0140 0.0072 0.0131 N 8 8 4 GROUP: 4-M:6.0 mg base/kg/day 7535 0.078 0.098 0.088 7511 0.102 0.100 0.106	
RROUP: 4-M:6.0 mg base/kg/day 7535 0.078 0.098 0.088 7511 0.102 0.100 0.106	
GROUP: 4-M:6.0 mg base/kg/day 7535 0.078 0.098 0.088 7511 0.102 0.100 0.106	
7535 0.078 0.098 0.088 7511 0.102 0.100 0.106	
7535 0.078 0.098 0.088 7511 0.102 0.100 0.106	
7511 0.102 0.100 0.106	
7507 0.130 0.102 0.118	
7508 0.130 0.102	
7509 0.098 0.084	
7518 0.108 0.098	
7524 0.094 0.090	
MEAN 0.106 0.098 0.103	
SD 0.0176 0.0072 0.0125	
N 8 8 4	



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: PR INTERVAL

STUDY ID: 097

STUDY NO: 097ECG					
ABBR: PR					UNITS: s
	ANIMAL II	Pretest	Week 13	Week 26	
	GROUP: 1	-F:0 mg base/k	g/day		
	7557	0.084	0.106	0.102	
	7541	0.112	0.118	0.126	
	7566	0.104	0.094	0.120	
	7549	0.122	0.140	0.136	
	7555	0.088	0.090		
	7558	0.106	0.100		
	7573	0.104	0.118		
	7542	0.122	0.112	••	
	MEAN	0.105	0.110	0.121	
	SD	0.0139	0.0161	0.0143	
	N	8	8	4	
		•••••			
	GROUP: 2	F:0.1 mg base	/kg/day		
	7543	0.104	0.102	0.080	
	7553	0.120	0.112	0.100	
	7545	0.100	0.110	0.106	
	7552	0.114	0.112	0.130	
	7569	0.110	0.106		
	7560	0.100	0.114		
	7567	0.100	0.106		
	7550	0.108	0.108	••	
	MEAN	0.107	0.109	0.104	
	SD	0.0074	0.0040	0.0206	
	N	8	8	4	

(--)-Data Unavailable



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: PR INTERVAL

STUDY ID: 097 STUDY NO: 097ECG					SEX: FEMALE UNITS: sec	
ABBR: PR					Ontio, Sec	
	ANIMAL I	D Pretest				
	GROUP: 3	-F:2.0 mg base	/kg/day	• • • • • • • • • • • • • • • • • • • •		
	7562	0.112	0.114	0.112		
				0.100		
	7571	0.096		0.116		
	7561	0.116	0.100	0.104		
	7564	0.106	0.102			
	7574	0.094	0.100			
	7556	0.104	0.098			
	7572	0.130	0.100			
	MEAN	0.107	0.102	0.108		
	S0	0.0125	0.0050	0.0073		
	N	8	8	4		
	GROUP: 4	GROUP: 4-F:6.0 mg base/kg/day				
	7539	0.096	0.112	0.096		
	7563	0.120	0.098	0.130		
	7540	0.104	0.100	0.100		
	7554	0.106	0.104	0.098		
	7568	0.120	0.120			
	7544	0.104	0.092			
	7546	0.094	0.090			
	7551	0.136	0.122			
	MEAN	0.110	0.105	0.106		
•	SD	0.0142	0.0121	0.0161		
	N	8	8	4		



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: QT INTERVAL

STUDY IO: 097
SEX: MALE
STUDY NO: 097ECG
ABBR: QT
UNITS: sec

ABBR: QT					UNITS: sec
	ANIMAL IC) Pretest	Week 13	Week 26	
	GROUP: 1-	M:0 mg base/k	g/day		
	7531	0.196	0.184	0.180	
	7532	0.222	0.182	0.196	
	7512	0.198	0.186	0.160	
	7515	0.180	0.190	0.184	
	7521	0.180	0.160		
	7533	0.220	0.200		
	7520	0.186	0.190		
	7505	0.200	0.198		
	MEAN	0.400	0.407	0.400	
	MEAN	0.198	0.186	0.180	
	SD	0.0163	0.0123	0.0150	
	N	8	8	4	
		M:0.1 mg base	e/kg/day		
	7527	0.214	0.198	0.180	
	7519	0.182	0.178	0.170	
	7529	0.184	0.190	0.196	
	7536	0.200	0.190	0.174	
	7503	0.220	0.200		
	7523	0.218	0.184		
	7517	0.182	0.220		
	7528	0.210	0.176		
	MEAN	0.201	0.192	0.180	
•	SD	0.0165	0.0142	0.0114	
	N	8	8	4	
		0	S	4	



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: QT INTERVAL

STUDY ID: 097 SEX: MALE STUDY NO: 097ECG UNITS: sec ABBR: QT Week 13 Week 26 ANIMAL ID Pretest GROUP: 3-M:2.0 mg base/kg/day 7538 0.206 0.200 0.184 7516 0.180 0.190 0.190 7522 0.194 0.164 0.180 0.200 0.182 0.180 7510 0.200 7576 0.182 7506 0.190 0.200 --7502 0.210 0.232 0.198 7514 0.176 0.197 0.191 MEAN 0.184

0.0206

8

0.0047

GROUP: 4-M:6.0 mg base/kg/day 0.204 0.184 7535 0.174 7511 0.130 0.174 0.190 7530 0.196 0.186 0.180 7507 0.194 0.190 0.196 7508 0.180 0.178 7509 0.208 0.192 7518 0.190 0.210 7524 0.198 0.180 0.188 MEAN 0.187 0.185 SD 0.0247 0.0112 0.0099 N 8 8

0.0094

8

SD

N



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: QT INTERVAL

STUDY ID: 097 STUDY NO: 097ECG					SEX: FEMALE
ABBR: QT					UNITS: sec
	ANIMAL II	Pretest	Week 13	Week 26	
	GROUP: 1	F:0 mg base/k	g/day		
	7557	0.216	0.176	0.186	
	7541	0.190	0.198	0.190	
	7566	0.208	0.190	0.170	
	7549	0.202	0.188	0.186	
	7555	0.174	0.180		
	7558	0.232	0.200		
	7573	0.204	0.240		
	7542	0.188	0.160		
	MEAN	0.202	0.192	0.183	
	SD	0.0180	0.0234	0.0089	
	N	8	8	4	
		P 0 4 1	n		
		F:0.1 mg base		0.400	
	7543	0.200	0.186	0.180	
	7553	0.196	0.178	0.180	
	7545	0.190	0.166	0.166	
	7552	0.200	0.208	0.192	
	7569	0.180	0.180		
	7560	0.224	0.200		
	7567	0.228	0.174		
	7550	0.194	0.188		
*	MEAN	0.202	0.185	0.180	
	SD	0.0164	0.0137	0.0106	
	N	8	8	4	



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: QT INTERVAL

STUDY ID: 097					
STUDY NO: 097ECG ABBR: QT					UNITS: sec
ADDK: WI					
	ANIMAL ID	Pretest	Week 13	Week 26	
	conine. 3-	F:2.0 mg base	/kg/day		
	7562	0.180	0.184	0.164	
	7548	0.204	0.204	0.180	
	7571	0.184	0.178	0.210	
	7561	0.218	0.204	0.230	
	7564	0.180	0.210	••	
	7574	0.178	0.190		
	7556	0.190	0.210		
	7572	0.186	0.160		
	MEAN	0.190	0.193	0.196	
	SD	0.0140	0.0178	0.0296	
	N	8	8	4	
	N	o	Ü	4	
	GROUP: 4-	F:6.0 mg base			
	7539	0.212	0.184	0.210	
	7563	0.190	0.196	0.228	
	7540	0.220	0.190	0.200	
	7554	0.208	0.178	0.174	
	7568	0.226	0.180		
	7544	0.222	0.178		
	7546	0.210	0.176		
	7551	0.206	0.198		
	MEAN	0.212	0.185	0.203	
	SD	0.0113	0.0086	0.0225	
	N	8	8	4	



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Heart Rate

STUDY ID: 097 STUDY NO: 097ECG

	ANIMAL ID	Pretest	Week 13	Week 26	
	GROUP: 1-	4:0 mg base/k	g/day		
	7531	119	102	111	
	7532	136	174	131	
	7512	120	137	161	
	7515	130	133	128	
	7521	150	165		
	7533	143	115		
	7520	122	108	•• ••	
	7505	94	97		
	1.5				
	MEAN	127	129	133	
	SD	17.3	28.8	20.8	
	N	8	8	4	
		1:0.1 mg base			
	7527	134	145	168	
	7527 7519	134 146	145 143	137	
	7527 7519 7529	134 146 146	145 143 93	137 128	
	7527 7519	134 146	145 143	137	
	7527 7519 7529	134 146 146	145 143 93	137 128	
	7527 7519 7529 7536	134 146 146 144	145 143 93 97	137 128 134	
	7527 7519 7529 7536 7503	134 146 146 144 116	145 143 93 97 136	137 128 134	
	7527 7519 7529 7536 7503 7523	134 146 146 144 116 138	145 143 93 97 136 120	137 128 134	
	7527 7519 7529 7536 7503 7523 7517 7528	134 146 146 144 116 138 140	145 143 93 97 136 120 123 160	137 128 134 	
•	7527 7519 7529 7536 7503 7523 7517	134 146 146 144 116 138 140	145 143 93 97 136 120 123	137 128 134 	



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Heart Rate

STUDY NO: 097ECG ABBR: HR					UNITS: bpm
	ANIMAL ID	Pretest	Week 13		
	GROUP: 3-I	1:2.0 mg base	/kg/day		
	7538	140	133	140	
	7516	139	120	158	
	7522	130	140	153	
	7510	128	140	130	
	7576	122	91		
	7506	137	138		
	7502	118	102		
	7514	116	150		
	MEAN	129	127	145	
	SD	9.5	20.7	12.7	
	N	. 8	8	4	
		1:6.0 mg base		174	
	7535	155	150	141	
	7511	162	128	105	
	7530	98	87	134	
	7507	154	134	132	
	7508	139	162	• •	
	7509	147	140	• •	
	7518	141	136	• •	
	7524	150	158	••	
	MEAN	143	137	128	
	SD	19.8	23.4	15.8	
	N	8	8	4	

(--)-Data Unavailable



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Heart Rate

STUDY ID: 097					SEX: FEMALE
STUDY NO: 097ECG					Inites L
ABBR: HR					UNITS: bpm
		D Pretest		Week 26	
		-F:0 mg base/k			
	7557	115	130	84	
	7541	142	136	154	
	7566	106	134	179	
	7549	125	105	120	
	7555	161	165		
	7558	92	109		
	7573	150	114		
	7542	111	127		
		405	400	471	
	MEAN	125	128	134	
	SD	23.8	19.1	41.3	
	N	8	8	4	
	GROUP: 2	-F:0.1 mg base	/kg/day		
	7543	128	114	136	
	7553	119	100	143	
	7545	154	155	132	
	7552	120	115	118	
	7569	143	127	••	
	7560	130	120		
	7567	133	155	• •	
	7550	135	125		
	MEAN	133	126	132	
	SD	11.6	19.5	10.5	
	N	8	8	4	



INDIVIDUAL ANIMAL REPORT BY GROUP TEST: Heart Rate

STUDY ID: 097
SEX: FEMALE
STUDY NO: 097ECG
ABBR: HR
UNITS: bpm

	ANIMAL I	D Pretest	Week 13	Week 26	
	GROUP: 3	-F:2.0 mg bas	e/kg/day		
	7562	146	123	146	
	7548	123	122	117	
	7571	134	127	102	
	7561	120	120	107	
	7564	127	100		
	7574	135	87	w w	
	7556	120	174		
	7572	132	173		
	MEAN	130	128	118	
	SD	8.9	31.0	19.7	
	N	8	8	4	
		-F:6.0 mg bas	e/kg/day		
	7539	125	108	123	
	7563	150	129	139	
	7540	92	87	126	
	7554	150	132	170	
	7568	135	130		
	7544	125	135		
	7546	120	115		
	7551	87	128		
	MEAN	123	121	140	
*	SD	23.5	16.3	21.5	

(--)-Data Unavailable

APPENDIX 10

Ophthalmology Report

ANIMAL EYE ASSOCIATES

2845 SOUTH HARLEM • BERWYN, ILLINOIS 60402 • (708)749-4200 372 SOUTH MILWAUKEE AVE. • WHEELING, ILLINOIS 60090 • (708) 215-3933

SAMUEL J. VAINISI, DVM Diplomate American College of Veterinary Ophthalmologists GRETCHEN M. SCHMIDT, DVM Diplomate American College of Veterinary Ophthelmologists

OPHTHALMIC REPORT

UIC/TRL Study No. 097

THIRTEEN WEEK ORAL TOXICITY STUDY OF WR238605 WITH A THIRTEEN WEEK RECOVERY PERIOD IN DOGS

On November 11, 1992 (Week -3), seventy-four Beagle dogs were given ophthalmic examinations. A male dog (No. 7534) had focal areas of retinal dysplasia which disqualified him from the study. A female dog (No. 7570) had pseudo papilledema of the optic discs (extensive myelinization) which did not disqualify her from the study if she was needed.

On March 10, 1993 (Week 13), I re-examined the sixty-four dogs, which were used in Study No. 097. All dogs in control, low and mid dose groups appeared similar to their previous exam on November 11, 1992. One high dose female (No. 7554) had congested retinal vessels. This finding would be consistent with altered hematological values such as hemoglobin or hematocrit. There was no loss of vision in this animal.

On June 9, 1993 (Week 26), I re-examined thirty-two recovery dogs which were used in Study No. 097. All animals appeared to be comparable to the pretest state including the high dose female (No. 7554) who had congested retinal vessels at Week 13.

Sincerely,

Samuel J. Vainisi, D.V.M.

Professor of Comparative

Ophthalmology, U. of IL. at Chicago

Diplomate, American College of Veterinary Ophthalmologists

7/21/93

DRAFT

Ophthalmic Examinations

Dose	Sex	Animal Number	R.E.	Week -3 L.E.	R.E.	Week 13 L.E.	R.E.	Week 26 L.E.
	м	7505 7512 7515 7520 7521 7531 7532 7533	WNL WNL WNL WNL WNL WNL WNL	WNL WNL WNL WNL WNL WNL WNL	WNL WNL WNL WNL WNL WNL WNL	WNL WNL WNL WNL WNL WNL WNL	WNL WNL WNL	WNL WNL - WNL WNL
0	F	7541 7542 7549 7555 7557 7558 7566 7573	WNL WNL WNL WNL WNL WNL WNL	WNL WNL WNL WNL WNL WNL WNL	WNL WNL WNL WNL WNL WNL WNL	WNL WNL WNL WNL WNL WNL WNL	WNL WNL WNL	WNL WNL
	М	7503 7517 7519 7523 7527 7528 7529 7536	WNL WNL WNL WNL WNL WNL	WNL WNL WNL WNL WNL WNL WNL	WNL WNL WNL WNL WNL WNL WNL WNL	WNL WNL WNL WNL WNL WNL WNL	WNL WNL WNL WNL	WNL WNL WNL WNL
0.1	F	7543 7545 7550 7552 7553 7560 7567 7569	WNL WNL WNL WNL WNL WNL WNL	WNL WNL WNL WNL WNL WNL WNL WNL	WNL WNL WNL WNL WNL WNL WNL	WNL WNL WNL WNL WNL WNL WNL	WNL WNL WNL	WNL WNL WNL - -
2.0	м	7502 7506 7510 7514 7516 7522 7538 7576	WNL WNL WNL WNL WNL WNL WNL	WNL WNL WNL WNL WNL WNL WNL	WNL WNL WNL WNL WNL WNL WNL WNL	WNL WNL WNL WNL WNL WNL WNL	WNL WNL WNL	WNL WNL WNL
	F	7548 7556 7561 7562 7564 7571 7572 7574	WNL WNL WNL WNL WNL WNL WNL	WNL WNL WNL WNL WNL WNL WNL	WNL WNL WNL WNL WNL WNL WNL	WNL WNI WNL WNL WNL WNL WNL	WNL WNL WNL	WNL WNL WNL -
	М	7507 7508 7509 7511 7518 7524 7530 7535	WNL WNL WNL WNL WNL WNL WNL	WNL WNL WNL WNL WNL WNL WNL WNL	WNL WNL WNL WNL WNL WNL WNL	WNL WNL WNL WNL WNL WNL WNL WNL	WNL WNL WNL	WNL WNL WNL WNL
6.0	F	7539 7540 7544 7546 7554 7554 7563 7568	WNL WNL WNL WNL WNL WNL WNL WNL	WNL WNL WNL WNL WNL WNL WNL WNL	WNL WNL WNL WNL WNL WNL WNL WNL WNL	WNL WNL WNL WNL WNL WNL (RVC) WNL	WNL WNL WNL	WNL WNL - WNL WNL

Dose = mg base/kg/day
R.E. = Right eye
L.E. = Left eye
- = Animal previously sacrificied
WNL = Within normal limits
WNL(X) = Observation noted is within normal limits
RVC = Retinal vessels congested

APPENDIX 11

Individual Organ Weights

BAFT

THIRTEEN WEEK ORAL TOXICITY STUDY OF WR 238605 WITH A THIRTEEN WEEK RECOVERY PERIOD IN DOGS

INDIVIDUAL ORGAN WEIGHTS STUDY: 097 SEX: MALE GROUP: 1M - 0 mg base/kg/day ALL FATES DAYS: 91-92 ALL BALANCES ANIMAL ID: 7505 7520 7521 7533 BALANCE NO .: BODY WEIGHT (KG) 10.7 11.0 10.5 11.8 Adrenals (pr) (G) % BODY WEIGHT % BRAIN WEIGHT 0.005 1.70 1.16 0.93 0.011 0.016 0.008 2.23 1.55 1.01 Brain (G) 76.22 74.63 85.54 % BODY WEIGHT 0.712 0.678 0.815 0.777 Heart (G) 98.79 108.20 96.63 91.01 % BODY WEIGHT % BRAIN WEIGHT 0.923 0.984 0.867 0.819 129.61 144.98 106.39 105.40 Kidneys (pr) (G) % BODY WEIGHT % BRAIN WEIGHT 53.52 51.57 57.01 51.16 0.500 0.469 0.483 0.487 70.22 69.10 59.81 62.18 258.30 2.348 Liver (G) 282.01 238.49 299.84 % BODY WEIGHT % BRAIN WEIGHT 2.636 2.271 2.541 369.99 327.05 346.11 278.81 Spleen (G) % BODY WEIGHT % BRAIN WEIGHT 38.13 32.88 28.03 33.33 0.356 0.299 0.238 0.317 30.57 50.03 44.06 38.96 Testes w/Epidid. (pr) (G) 15.26 17.78 8.23 15.84 % BODY WEIGHT 0.145 0.134 0.166 0.075 Thyroids-Parathyroids (G) 0.90 % BODY WEIGHT % BRAIN WEIGHT 0.011 0.008 .. 0.010

1.50

1.21

(--)-Data Unavailiable

INDIVIDUAL ORGAN WEIGHTS

STUDY: 097 SEX: MALE

GROUP: 2M - 0.1 mg base/kg/day

GROUI ALL FATES	P: 2M - 0.1 mg DAYS: 91-92	base/kg/day ALL BA	LANCES	
 ANIMAL ID: BALANCE NO.:	7503	7517	7523	7528
 BODY WEIGHT (KG)	11.2	10.8	10.0	11.2
Adrenals (pr) (G) % BODY WEIGHT % BRAIN WEIGHT	0.013	1.84 0.017 2.15	0.016	0.009
Brain (G) % BODY WEIGHT	73.98 0.661	85.69 0.793	72.47 0.725	
Heart (G) % BODY WEIGHT % BRAIN WEIGHT	0.746	99.11 0.918 115.66	0.912	0.837
Kidneys (pr) (G) % BODY WEIGHT % BRAIN WEIGHT	0.523	55.77 0.516 65.08	0.499	0.477
Liver (G) % BODY WEIGHT % BRAIN WEIGHT	297.09 2.653 401.58	296.21 2.743 345.68	283.50 2.835 391.20	246.08 2.197 340.69
Spleen (G) % BODY WEIGHT % BRAIN WEIGHT	36.12 0.323 48.82	34.25 0.317 39.97	33.38 0.334 46.06	24.92 0.223 34.50
Testes w/Epidid. (pr) % BODY WEIGHT % BRAIN WEIGHT	(G) 15.21 0.136 20.56	20.12 0.186 23.48	18.38 0.184 25.36	19.07 0.170 26.40
Thyroids-Parathyroids % BODY WEIGHT % BRAIN WEIGHT	(G) 1.05 0.009 1.42	1.47 0.014 1.72	1.87 0.019 2.58	0.96 0.009 1.33



	INDIVID	JAL ORGAI		HTS		
STUDY: 097 SEX: MALE	GROUP: 3	M - 2.0 mg ba DAYS: 91-92	se/kg/day ALL BAL	ANCES		
	ANIMAL ID: BALANCE NO.:	7502		7514	7576	
	BODY WEIGHT (KG)		10.8		9.9	
	Adrenals (pr) (G) % BODY WEIGHT % BRAIN WEIGHT	1.10 0.010 1.34	1.20 0.011 1.77	1.50 0.015 2.00	1.43 0.014 1.88	
	Brain (G) % BODY WEIGHT	81.93 0.745	67.72 0.627	75.18 0.752	76.03 0.768	
	Heart (G) % BODY WEIGHT % BRAIN WEIGHT	0.842	84.11 0.779 124.20	89.65 0.897 119.25	97.71 0.987 128.52	
	Kidneys (pr) (G) % BODY WEIGHT % BRAIN WEIGHT	0.564	47.06 0.436 69.49	55.20 0.552 73.42	46.91 0.474 61.70	
	Liver (G) % BODY WEIGHT % BRAIN WEIGHT	301.49 2.741 367.98	294.38 2.726 434.70	362.65 3.627 482.38	313.83 3.170 412.77	
	Spleen (G) % BODY WEIGHT % BRAIN WEIGHT	0.522	33.90 0.314 50.06	36.28 0.363 48.26	43.35 0.438 57.02	
	Testes w/Epidid. (pr) (G) % BODY WEIGHT % BRAIN WEIGHT	15.10 0.137 18.43	17.89 0.166 26.42	22.15 0.222 29.46	13.40 0.135 17.62	
	Thyroids-Parathyroids (G) % BODY WEIGHT % BRAIN WEIGHT	1.39 0.013 1.70	1.02 0.009 1.51	0.94 0.009 1.25	1.32 0.013 1.74	



0.015

0.008

0.80

0.022

3.15

0.014

1.72

THIRTEEN WEEK ORAL TOXICITY STUDY OF WR 238605 WITH A THIRTEEN WEEK RECOVERY PERIOD IN DOGS

INDIVIDUAL ORGAN WEIGHTS STUDY: 097 SEX: MALE SEX: MALE GROUP: 4M - 6.0 mg base/kg/day ALL FATES DAYS: 91-92 ALL BALANCES ANIMAL ID: 7508 7509 7518 7524 BALANCE NO .: BODY WEIGHT (KG) 8.9 8.3 10.5 10.5 1.69 Adrenals (pr) (G) % BODY WEIGHT 1.36 2.19 1.16 0.020 0.011 0.015 0.021 % BRAIN WEIGHT 1.81 1.95 3.03 1.51 Brain (G) 75.09 86.71 72.17 76.66 % BODY WEIGHT 0.844 1.045 0.687 0.730 Heart (G) 87.51 86.55 88.26 99.07 % BODY WEIGHT % BRAIN WEIGHT 0.983 1.043 0.944 0.841 129.23 99.82 122.29 116.54 54.10 0.515 Kidneys (pr) (G) % BODY WEIGHT % BRAIN WEIGHT 51.57 53.01 52.46 0.579 0.639 0.500 68.68 61.13 72.69 70.57 Liver (G) % BODY WEIGHT % BRAIN WEIGHT 355.67 3.387 363.89 381.26 356.62 4.593 3.396 4.089 484.61 439.70 494.14 463.96 35.71 57.96 53.70 Spleen (G) 71.08 % BODY WEIGHT % BRAIN WEIGHT 0.401 0.856 0.552 0.511 47.56 81.97 80.31 70.05 Testes w/Epidid. (pr) (G) 14.92 14.88 24.12 % BODY WEIGHT % BRAIN WEIGHT 0.179 0.205 0.230 0.168 19.87 29.82 31.46 Thyroids-Parathyroids (G) 1.29 0.69 2.27 1.60

% BODY WEIGHT % BRAIN WEIGHT



INDIVIDUAL ORGAN WEIGHTS

STUDY: 097 SEX: FEMALE

GROUP: 1F - 0 mg base/kg/day

SEX: FEMALE	ALL FATES	1F - 0 mg bas DAYS: 91-92		ANCES	
	ANIMAL ID: BALANCE NO.:	7542	7555	7558	7573
	BODY WEIGHT (KG)	10.7	8.5	8.2	9.7
	Adrenals (pr) (G) % BODY WEIGHT % BRAIN WEIGHT	1.19 0.011 1.71	1.60 0.019 2.35	1.08 0.013 1.63	1.11 0.011 1.68
	Brain (G) % BODY WEIGHT	69.40 0.649	68.19 0.802	66.09 0.806	66.04 0.681
	Heart (G) % BODY WEIGHT % BRAIN WEIGHT	87.14 0.814 125.56	68.32 0.804 100.19	77.09 0.940 116.64	82.53 0.851 124.97
	Kidneys (pr) (G) % BODY WEIGHT % BRAIN WEIGHT		36.45 0.429 53.45	0.475	
	Liver (G) % BODY WEIGHT % BRAIN WEIGHT	291.05 2.720 419.38	232.80 2.739 341.40	214.30 2.613 324.25	254.49 2.624 385.36
	Ovaries (G) % BODY WEIGHT % BRAIN WEIGHT	1.83 0.017 2.64	0.80 0.009 1.17	0.79 0.010 1.20	0.70 0.007 1.06
	Spleen (G) % BODY WEIGHT % BRAIN WEIGHT	29.73 0.278 42.84	23.81 0.280 34.92	22.85 0.279 34.57	22.79 0.235 34.51
*	Thyroids-Parathyroids (G) % BODY WEIGHT % BRAIN WEIGHT	0.90 0.008 1.30	1.21 0.014 1.77	0.94 0.011 1.42	1.08 0.011 1.64

18.58

0.174 26.77

1.62

0.019

Uterus (G)

% BODY WEIGHT % BRAIN WEIGHT

5.63 0.058 8.53

4.20

0.051 6.35

THIRTEEN WEEK ORAL TOXICITY STUDY OF WR 238605 WITH A THIRTEEN WEEK RECOVERY PERIOD IN DOGS

INDIVIDUAL ORGAN WEIGHTS STUDY: 097 GROUP: 2F - 0.1 mg base/kg/day ALL FATES DAYS: 91-92 ALL BA SEX: FEMALE ALL BALANCES ANIMAL ID: 7550 7560 7569 7567 BALANCE NO .: BODY WEIGHT (KG) 10.2 8.5 8.5 7.1 Adrenals (pr) (G) % BODY WEIGHT % BRAIN WEIGHT 1.10 1.23 1.29 1.22 0.014 0.011 0.015 0.017 1.38 1.51 1.80 1.70 Brain (G) % BODY WEIGHT 79.60 81.58 71.53 71.64 0.960 0.842 1.009 0.780 Heart (G) % BODY WEIGHT 90.35 81.68 72.63 80.68 0.886 0.961 0.854 1.136 % BRAIN WEIGHT 113.51 100.12 101.54 112.62 Kidneys (pr) (G) % BODY WEIGHT % BRAIN WEIGHT 36.01 48.42 36.46 36.68 0.475 0.429 0.432 0.507 60.83 44.69 51.28 50.27 Liver (G) 312.58 202.92 184.50 240.61 % BODY WEIGHT 3.065 2.387 2.171 3.389 % BRAIN WEIGHT 392.69 248.74 257.93 335.86 Ovaries (G) 1.94 0.71 0.85 1.11 % BODY WEIGHT 0.019 0.008 0.013 0.012 2.44 0.87 1.55 1.19 Spleen (G) 26.79 28.07 25.26 30.33 % BODY WEIGHT % BRAIN WEIGHT 0.263 0.330 0.297 0.427 33.66 34.41 35.31 42.34 Thyroids-Parathyroids (G) 1.74 0.66 1.08 1.27 % BODY WEIGHT % BRAIN WEIGHT 0.017 0.008 0.018 0.013 0.81 1.51 1.77

Uterus (G)

% BODY WEIGHT % BRAIN WEIGHT 2.90

0.034

3.55

11.32

0.111

14.22

4.03

5.63

0.047

3.68

0.052

5.14



	INDIVID	JAL ORGAI	WEIG	HTS		***************************************
STUDY: 097 SEX: FEMALE	GROUP: 3 ALL FATES	F - 2.0 mg ba DAYS: 91-92	se/kg/day ALL BAL	.ANCES		•
***************************************	ANIMAL ID: BALANCE NO.:	7556			7574	
	BODY WEIGHT (KG)	8.1	7.6	10.7	8.0	
	Adrenals (pr) (G) % BODY WEIGHT % BRAIN WEIGHT	1.05 0.013 1.41	1.11 0.015 1.47	1.47 0.014 1.98	1.31 0.016 1.65	
	Brain (G) % BODY WEIGHT	74.30 0.917	75.44 0.993	74.35 0.695	79.42 0.993	
	Heart (G) % BODY WEIGHT % BRAIN WEIGHT	91.92 1.135 123.71	77.18 1.016 102.31	79.74 0.745 107.25	78.27 0.978 98.55	
	Kidneys (pr) (G) % BODY WEIGHT % BRAIN WEIGHT	40.33 0.498 54.28	36.89 0.485 48.90	45.91 0.429 61.75	43.94 0.549 55.33	
	Liver (G) % BODY WEIGHT % BRAIN WEIGHT	259.87 3.208 349.76	298.46 3.927 395.63	338.91 3.167 455.83	277.50 3.469 349.41	
	Ovaries (G) % BODY WEIGHT % BRAIN WEIGHT		0.59 0.008 0.78	1.45 0.014 1.95	0.60 0.008 0.76	
	Spleen (G) % BODY WEIGHT % BRAIN WEIGHT	36.93 0.456 49.70	25.25 0.332 33.47	45.29 0.423 60.91	48.07 0.601 60.53	
	Thyroids-Parathyroids (G) % BODY WEIGHT % BRAIN WEIGHT	0.99 0.012 1.33	1.01 0.013 1.34	1.50 0.014 2.02	1.11 0.014 1.40	
*	Uterus (G) % BODY WEIGHT % BRAIN WEIGHT	2.84 0.035 3.82	1.76 0.023 2.33	19.26 0.180 25.90	3.18 0.040 4.00	

THIRTEEN WEEK ORAL TOXICITY STUDY OF WR 238605 WITH A THIRTEEN WEEK RECOVERY PERIOD IN DOGS

INDIVIDUAL ORGAN WEIGHTS STUDY: 097 SEX: FEMALE GROUP: 4F - 6.0 mg base/kg/day ALL FATES DAYS: 91-92 ALL BALANCES ANIMAL ID: 7544 7546 7551 7568 BALANCE NO .: BODY WEIGHT (KG) 7.7 9.7 8.0 7.6 Adrenals (pr) (G) % BODY WEIGHT % BRAIN WEIGHT 1.41 1.22 1.95 0.53 0.019 0.016 0.020 0.007 1.83 2.64 0.73 1.88 Brain (G) 75.17 66.80 73.75 72.33 % BODY WEIGHT 0.989 0.868 0.760 0.904 Heart (G) % BODY WEIGHT % BRAIN WEIGHT 68.27 69.97 69.06 85.81 0.898 0.909 0.885 0.863 90.82 104.75 116.35 95.48 Kidneys (pr) (G) % BODY WEIGHT % BRAIN WEIGHT 39.32 0.517 41.98 44.55 39.03 0.545 0.459 0.488 52.31 60.41 53.96 243.01 280.81 % BODY WEIGHT % BRAIN WEIGHT 3.198 323.28 3.647 420.37 3.643 3.393 479.19 375.24 1.02 0.82 0.87 Ovaries (G) % BODY WEIGHT % BRAIN WEIGHT 0.013 0.011 0.009 1.18 1.23 76.31 106.91 72.90 Spleen (G) 95.01 % BODY WEIGHT % BRAIN WEIGHT 0.979 0.911 1.004 1.388 101.52 160.04 128.83 100.79 Thyroids-Parathyroids (G) 1.33 0.78 1.15 1.21 % BODY WEIGHT % BRAIN WEIGHT 0.018 0.010 0.012 0.015 1.77 1.17 1.56 1.67 5.36 2.49 6.20 10.44 Uterus (G) % BODY WEIGHT 0.032 0.064 0.071 0.131 7.13 8.41 14.43

(--)-Data Unavailiable



INDIVIDUAL ORGAN WEIGHTS

STUDY: 097 SEX: MALE

GROUP: 1M - 0 mg base/kg/day

SEX: MALE	ALL FATES DAYS	: 182-183		LANCES		_
	ANIMAL ID: BALANCE NO.:	7512	7515	7531	7532	
	BODY WEIGHT (KG)	11.5	12.7	11.3	10.7	•
	Adrenals (pr) (G) % BODY WEIGHT % BRAIN WEIGHT	1.04 0.009 1.42	1.06 0.008 1.19	1.23 0.011 1.75	1.36 0.013 1.67	
	Brain (G) % BODY WEIGHT	73.30 0.637	89.19 0.702	70.15 0.621	81.38 0.761	
	Heart (G) % BODY WEIGHT % BRAIN WEIGHT	92.49 0.804 126.18	102.63 0.808 115.07	97.88 0.866 139.53	94.52 0.883 116.15	
	Kidneys (pr) (G) % BODY WEIGHT % BRAIN WEIGHT	65.81 0.572 89.78		58.85 0.521 83.89		
	Liver (G) % BODY WEIGHT % BRAIN WEIGHT	305.84 2.659 417.24	272.88 2.149 305.95	260.10 2.302 370.78	232.09 2.169 285.19	
	Spleen (G) % BODY WEIGHT % BRAIN WEIGHT	29.52 0.257 40.27	52.33 0.412 58.67	30.66 0.271 43.71	32.23 0.301 39.60	
	Testes w/Epidid. (pr) (G) % BODY WEIGHT % BRAIN WEIGHT	24.54 0.213 33.48	24.37 0.192 27.32	17.94 0.159 25.57	19.79 0.185 24.32	
	Thyroids-Parathyroids (G) % BODY WEIGHT % BRAIN WEIGHT	1.04 0.009 1.42	1.15 0.009 1.29	0.82 0.007 1.17	1.30 0.012 1.60	

THIRTEEN WEEK ORAL TOXICITY STUDY OF WR 238605 WITH A THIRTEEN WEEK RECOVERY PERIOD IN DOGS

INDIVIDUAL ORGAN WEIGHTS

STUDY: 097 SEX: MALE

GROUP: 2M - 0.1 mg base/kg/day

	SEX: MALE			'S: 182-183 ALL BALANCES						
		ANIMAL ID: BALANCE NO.:	7519		7529	7536				
-		BODY WEIGHT (KG)	12.3	11.0	11.3	10.4				
		Adrenals (pr) (G) % BODY WEIGHT % BRAIN WEIGHT	1.73 0.014 2.39	1.27 0.012 1.51	1.51 0.013 2.09	1.35 0.013 1.83				
		Brain (G) % BODY WEIGHT	72.27 0.588	83.85 0.762	72.25 0.639	73.89 0.710				
		Heart (G) % BODY WEIGHT % BRAIN WEIGHT	90.36 0.735 125.03	88.42 0.804 105.45	94.52 0.836 130.82	103.80 0.998 140.48				
		Kidneys (pr) (G) % BODY WEIGHT % BRAIN WEIGHT	60.17 0.489 83.26	50.56 0.460 60.30	68.79 0.609 95.21	59.83 0.575 80.97				
		Liver (G) % BODY WEIGHT % BRAIN WEIGHT	268.37 2.182 371.34	279.34 2.539 333.14	320.06 2.832 442.99	272.30 2.618 368.52				
		Spleen (G) % BOOY WEIGHT % BRAIN WEIGHT	28.24 0.230 39.08	49.84 0.453 59.44	39.81 0.352 55.10	23.24 0.223 31.45				
		Testes w/Epidid. (pr) (G % BODY WEIGHT % BRAIN WEIGHT	19.40 0.158 26.84	18.51 0.168 22.08	21.10 0.187 29.20	18.97 0.182 25.67				
		Thyroids-Parathyroids (G % BODY WEIGHT % BRAIN WEIGHT			1.14 0.010 1.58	1.08 0.010 1.46				

THIRTEEN WEEK ORAL TOXICITY STUDY OF WR 238605 WITH A THIRTEEN WEEK RECOVERY PERIOD IN DOGS

INDIVIDUAL ORGAN WEIGHTS GROUP: 3M - 2.0 mg base/kg/day ALL FATES DAYS: 182-183 ALL BALANCES SEX: MALE ANIMAL ID: 7516 7510 7522 7538 BALANCE NO .: BODY WEIGHT (KG) 12.7 10.0 11.3 11.3 Adrenals (pr) (G) % BODY WEIGHT % BRAIN WEIGHT 2.15 1.69 1.49 1.55 0.017 0.013 0.014 0.017 2.67 2.18 2.08 1.94 Brain (G) 80.65 71.79 77.66 80.05 % BODY WEIGHT 0.635 0.777 0.635 0.708 Heart (G) 107.91 108.23 92.69 99.07 % BODY WEIGHT % BRAIN WEIGHT 0.850 1.082 0.820 0.877 133.80 139.36 129.11 123.76 Kidneys (pr) (G) % BODY WEIGHT % BRAIN WEIGHT 60.21 60.35 60.36 57.87 0.474 0.604 0.534 0.512 74.66 77.71 84.08 72.29 270.69 269.99 Liver (G) 366.81 292.53 % BODY WEIGHT 2.589 2.389 2.888 % BRAIN WEIGHT 454.82 348.56 44.75 0.396 Spleen (G) 51.59 37.13 29.76 % BODY WEIGHT 0.371 47.81 0.406 0.263 63.97 37.18 62.33 Testes w/Epidid. (pr) (G) 21.34 23.18 20.31 20.55 % BODY WEIGHT % BRAIN WEIGHT 0.232 0.168 0.180 0.182 26.46 29.85 28.29 25.67 Thyroids-Parathyroids (G) 1.36 1.73 1.54 1.32 % BODY WEIGHT 0.014 0.011 0.017 0.012

2.23

1.65

1.69

STUDY: 097 SEX: MALE

GROUP: 4M - 6.0 mg base/kg/day
ALL FATES DAYS: 182-183 ALL BALANCES

	ALL PAIES	DATS:	182-183	ALL E	BALANCES	
 ANIMAL ID BALANCE N			7507	7511	7530	7535
 BODY WEIG	HT (KG)		11.8	11.1	10.1	10.2
Adrenals % BODY % BRAIN	WEIGHT		1.08 0.009 1.52	1.46 0.013 1.66	1.19 0.012 1.68	
Brain (G) % BODY			71.18 0.603	87.80 0.791		
Heart (G) % BODY % BRAIN	WEIGHT		96.27 0.816 135.25	109.56 0.987 124.78	110.70 1.096 156.14	85.29 0.836 128.29
Kidneys (% BODY % BRAIN	WEIGHT		0.476	0.474	50.22 0.497 70.83	0.577
Liver (G) % BODY % BRAIN	WEIGHT		310.39 2.630 436.06	366.21 3.299 417.10	278.01 2.753 392.12	268.31 2.630 403.60
Spleen (G % BODY V % BRAIN	WEIGHT		0.277		25.81 0.256 36.40	0.345
Testes w/1 % BODY 1 % BRAIN		(G)	0.142		19.34 0.191 27.28	0.163
Thyroids-		(G)	1.26 0.011 1.77	0.013	1.50 0.015 2.12	1.46 0.014 2.20

THIRTEEN WEEK ORAL TOXICITY STUDY OF WR 238605 WITH A THIRTEEN WEEK RECOVERY PERIOD IN DOGS

INDIVIDUAL ORGAN WEIGHTS

STUDY: 097 SEX: FEMALE

GROUP: 1F - 0 mg base/kg/day ALL FATES DAYS: 182-183 ALL BALANCES

ALL FATES	DAYS:	182-183	S ALL BAI	ANCES		
 ANIMAL ID: BALANCE NO.:		7541	7549	7557		
 BODY WEIGHT (KG)			10.9			
Adrenals (pr) (G) % BODY WEIGHT % BRAIN WEIGHT		1.52 0.016 2.20	1.20 0.011 1.57	1.62 0.019 2.03	1.45 0.013 2.03	
Brain (G) % BODY WEIGHT			76.30 0.700			
Heart (G) % BODY WEIGHT % BRAIN WEIGHT		77.98 0.796 112.97	77.44 0.710 101.49	81.47 0.970 102.12	82.13 0.720 114.90	
Kidneys (pr) (G) % BODY WEIGHT % BRAIN WEIGHT		41.31 0.422 59.84	40.01 0.367 52.44	38.80 0.462 48.63	43.81 0.384 61.29	
Liver (G) % BODY WEIGHT % BRAIN WEIGHT		247.26 2.523 358.19	241.08 2.212 315.96	233.06 2.775 292.13	249.83 2.191 349.51	
Ovaries (G) % BODY WEIGHT % BRAIN WEIGHT		0.008	1.56 0.014 2.04	0.021	0.012	
Spleen (G) % BODY WEIGHT % BRAIN WEIGHT		0.321	37.54 0.344 49.20	0.297	0.331	
Thyroids-Parathyroids % BODY WEIGHT % BRAIN WEIGHT	(G)	1.14 0.012 1.65	0.96 0.009 1.26	1.02 0.012 1.28	1.26 0.011 1.76	
Uterus (G) % BODY WEIGHT % BRAIN WEIGHT		3.84 0.039 5.56	5.45 0.050 7.14	19.11 0.228 23.95	5.77 0.051 8.07	

THIRTEEN WEEK ORAL TOXICITY STUDY OF WR 238605 WITH A THIRTEEN WEEK RECOVERY PERIOD IN DOGS

INDIVIDUAL ORGAN WEIGHTS

STUDY: 097 SEX: FEMALE

GROUP: 2F - 0.1 mg base/kg/day
ALL FATES DAYS: 182-183 ALL BALANCES

 ALL TAILS	DA13. 102 103	ALL DA	EMMELS		
 ANIMAL ID: BALANCE NO.:	7543	7545	7552	7553	
 BODY WEIGHT (KG)	10.0	9.8	11.0	11.6	
Adrenals (pr) (G) % BODY WEIGHT % BRAIN WEIGHT	1.39 0.014 2.02	1.57 0.016 1.98	1.40 0.013 1.80	1.17 0.010 1.58	
Brain (G) % BODY WEIGHT	68.78 0.688	79.36 0.810	77.86 0.708	74.15 0.639	
Heart (G) % BODY WEIGHT % BRAIN WEIGHT	75.19 0.752 109.32	89.93 0.918 113.32	92.02 0.837 118.19	68.79 0.593 92.77	
Kidneys (pr) (G) % BODY WEIGHT % BRAIN WEIGHT	40.29 0.403 58.58	42.56 0.434 53.63	47.53 0.432 61.05	37.77 0.326 50.94	
Liver (G) % BOOY WEIGHT % BRAIN WEIGHT	206.75 2.068 300.60	2.339	343.34 3.121 440.97	2.326	
Ovaries (G) % BODY WEIGHT % BRAIN WEIGHT	1.08 0.011 1.57	0.90 0.009 1.13	2.07 0.019 2.66	1.87 0.016 2.52	
Spleen (G) % BODY WEIGHT % BRAIN WEIGHT	30.57 0.306 44.45	0.373	0.313	0.200	
Thyroids-Parathyroids (6 % BODY WEIGHT % BRAIN WEIGHT	0.71 0.007 1.03	1.11 0.011 1.40	1.09 0.010 1.40	0.78 0.007 1.05	
Uterus (G) % BODY WEIGHT % BRAIN WEIGHT	3.76 0.038 5.47	6.51 0.066 8.20	19.46 0.177 24.99	504.17 4.346 679.93	

THIRTEEN WEEK ORAL TOXICITY STUDY OF WR 238605 WITH A THIRTEEN WEEK RECOVERY PERIOD IN DOGS

INDIVIDUAL ORGAN WEIGHTS

STUDY: 097 SEX: FEMALE

GROUP: 3F - 2.0 mg base/kg/day
ALL FATES DAYS: 182-183 ALL BALANCES

	ALL PAIES	DATS:	102-183	ALL	BALANCES		
 ANIMAL II BALANCE I			7548		7562	7571	•
 BODY WEI	GHT (KG)		9.8		10.5	9.6	
% BODY	(pr) (G) WEIGHT WEIGHT		1.19 0.012 1.65	1.47 0.018 2.11	1.62 0.015 2.05	1.37 0.014 1.96	
Brain (G) % BODY	WEIGHT			69.77 0.841	78.93 0.752		
) WEIGHT I WEIGHT		79.46 0.811 110.01	1.057	0.736	79.65 0.830 113.85	
% BODY	(pr) (G) WEIGHT WEIGHT		41.39 0.422 57.30	42.22 0.509 60.51	41.27 0.393 52.29	38.32 0.399 54.77	
	WEIGHT WEIGHT		255.80 2.610 354.15		220.96 2.104 279.94		
	G) WEIGHT I WEIGHT		0.011	0.012	1.00 0.010 1.27	0.017	
	S) WEIGHT WEIGHT		40.02 0.408 55.41	18.38 0.221 26.34	30.96 0.295 39.22	41.19 0.429 58.88	
% BODY	Parathyroids ((WEIGHT WEIGHT	6)		1.08 0.013 1.55		0.012	
	i) WEIGHT WEIGHT		0.063	0.078	5.92 0.056 7.50	0.163	

INDIVIDUAL ORGAN WEIGHTS

STUDY: 097 SEX: FEMALE

CPOUR AF - 6 0 mg base/kg/day

GROUP: ALL FATES	4F - 6.0 mg b DAYS: 182-183				
 RALANCE NO.:	7539				
 BODY WEIGHT (KG)					
Adrenals (pr) (G) % BODY WEIGHT % BRAIN WEIGHT	1.27 0.015 1.69	1.27 0.013 1.89	1.15 0.010 1.42	1.23 0.013 1.57	
Brain (G) % BODY WEIGHT	74.95 0.903	67.03 0.670	80.82 0.735	78.22 0.823	
Heart (G) % BODY WEIGHT % BRAIN WEIGHT	70.20 0.846 93.66	90.11 0.901 134.43	93.41 0.849 115.58	69.39 0.730 88.71	
Kidneys (pr) (G) % BODY WEIGHT % BRAIN WEIGHT	38.46 0.463 51.31	45.35 0.454 67.66	50.84 0.462 62.91	47.26 0.497 60.42	
Liver (G) % BODY WEIGHT % BRAIN WEIGHT	244.78 2.949 326.59	306.11 3.061 456.68	360.96 3.281 446.62	276.54 2.911 353.54	
Ovaries (G) % BODY WEIGHT % BRAIN WEIGHT	1.16 0.014 1.55	2.58 0.026 3.85	1.09 0.010 1.35	2.48 0.026 3.17	
Spleen (G) % BODY WEIGHT % BRAIN WEIGHT	32.03 0.386 42.74	30.71 0.307 45.82	43.82 0.398 54.22	28.76 0.303 36.77	
Thyroids-Parathyroids (G) % BODY WEIGHT % BRAIN WEIGHT	0.68 0.008 0.91	1.21 0.012 1.81	0.95 0.009 1.18	0.93 0.010 1.19	
Uterus (G) % BODY WEIGHT % BRAIN WEIGHT	4.76 0.057 6.35	0.163	0.141	0.236	

APPENDIX 12

Pathology Report

THIRD DRAFT PATHOLOGY REPORT FOR
TRL STUDY NUMBER 097
THIRTEEN WEEK ORAL TOXICITY STUDY OF WR 238605
WITH A THIRTEEN WEEK RECOVERY PERIOD IN DOGS

PREPARED
BY
PATHOLOGY ASSOCIATES, INC.
10 WEST 35TH STREET
CHICAGO, IL 60616

FOR
TOXICOLOGY RESEARCH LABORATORY
UNIVERSITY OF ILLINOIS AT CHICAGO (UIC)
DEPARTMENT OF PHARMACOLOGY
P.O. BOX 6998
CHICAGO, IL 60680

MARCH 18, 1994

TABLE OF CONTENTS

		TABLE OF CONTENTS	-		(3)	F	77		
SEC	TION	TITLE				5		PA	AGE
I	Pathology Narrative Summary of Experimental D Protocol Required Tissues (Report Codes Table Abbreviation List	Design (Table I) Table II)		•••••		 			12 12 13
П	Project Summary Table Males Females								16
Ш	Severity Summary Table Males Females								28
IV	Tabulated Animal Data Males Females								39
V	Correlation of Gross and Micr Males						• • • • • •		90
VI	Quality Assurance Statement								107
VII	Appendix I: Bone Marrow Rep	port							109

Third Draft Pathology Report Toxicology Research Laboratory Study Number 097

DBAFT

SECTION I PATHOLOGY NARRATIVE

THIRD DRAFT PATHOLOGY REPORT



THIRTEEN WEEK ORAL TOXICITY STUDY OF WR 238605 WITH A THIRTEEN WEEK RECOVERY PERIOD IN DOGS

INTRODUCTION

This pathology report, submitted by Pathology Associates, Inc. (PAI) to Toxicology Research Laboratory (TRL), represents the gross and histopathology findings for the study designated as "Thirteen Week Oral Toxicity Study of WR 238605 with a Thirteen Week Recovery Period in Dogs", TRL Study Number 097.

EXPERIMENTAL DESIGN AND METHODS

Four groups, each composed of male and female Beagle dogs, were given the test article (WR 238605) or test article vehicle (aqueous 1% methylcellulose/0.4% Tween 80) by gastric intubation for 13 weeks, starting with Day 0. Dose levels administered are shown in the Summary of Experimental Design (Table I). The animals designated to be sacrificed after the 13-week dosing period were dosed up to and including the day prior to scheduled necropsy on Days 91 and 92 (week 14). Recovery animals were dosed for 91 days and then held for a 13-week recovery period. At the beginning of week 27, the recovery animals were sacrificed and necropsied. No animals were sacrificed moribund or found dead during the study. Necropsies were performed according to TRL Standard Operating Procedures under the supervision of Ralph M. Bunte, DVM or Michael J. Tomlinson, DVM, Ph.D. Tissues required by protocol for animals sacrificed at the end of dosing (Table II), except as noted below, were processed and slides prepared in accordance with PAI Standard Operating Procedures.

Except as noted below, these tissues from all animals sacrificed at the end of dosing were examined microscopically. Mammary gland was not present in sections from six animals (#7524, #7533, #7555, #7564, #7572, and #7573) even after repeated attempts to obtain this tissue. Thyroid/parathyroid gland (#7521), urinary bladder and prostate (#7502), skin/mammary gland (#7509), aorta (#7542), and pituitary gland (#7546) were missing from one animal each at trimming. Wet tissues from these animals were reviewed after trimming to verify that these tissues were missing. As no test article-related changes were detected in corresponding tissues in other animals, the absence of these tissues is not believed to have affected the outcome of the study.

After identification of test article-related changes, target tissues were examined in all recovery animals. Target tissues in animals sacrificed after dosing were re-examined at the time the sections of target tissues from recovery animals were examined. When necessary to clarify interpretation or grading of changes, the target tissue slides were mixed up and examined without knowledge of treatment group or time of sacrifice.

Microscopic findings for all groups are summarized in the Project Summary Tables (Section II). The mean group severity scores are found in the Severity Summary Tables (Section III). The mean group severity scores were determined by dividing the sum of all severity scores for a finding by the number of tissues examined. Microscopic findings in the protocol-required tissues for individual animals are presented in the Tabulated Animal Data Tables (Section IV). The correlation of the necropsy findings and histopathology findings are reported in the Correlation of Gross and Microscopic (Micro) Findings (Section V). The codes used as entries in these tables are explained in the Report Codes Table. Abbreviations used in these tables are explained in the Abbreviation List.

RESULTS AND DISCUSSION

The Results and Discussion section is divided into two parts: Diagnostic Terms and Histopathology Findings. The Diagnostic Terms portion lists and clarifies diagnostic terminology that may be unclear. Terms listed in the Diagnostic Terms portion of this section were not necessarily considered to be test article-related. The Histopathology Findings portion of this section reports the results and provides discussion of the histopathologic evaluation of the tissues.

Diagnostic Terms

The morphologic characteristics of observations and lesions which require comment are presented in subsequent paragraphs to aid in the interpretation of the data.

Lungs

The principal change in the lungs of these animals had three distinct components. First, there was pale eosinophilic amorphous to fibrillar material within alveoli. This was accompanied by large round to oval discrete cells which had abundant vacuolated cytoplasm. These cells were free in the lumina of alveoli and terminal bronchioles and did not appear to line alveolar septa. The third component of this change was the presence of neutrophils in variable numbers in affected alveoli. In order to be consistent with morphologically similar changes that occurred in the lungs of rats given this test article under similar conditions (TRL Study Number 098), this change was diagnosed as alveolar proteinosis.

Subacute inflammation consisted of macrophages and a few lymphocytes forming cuffs around venules and small arterioles. This change occurred within areas of alveolar proteinosis and acute inflammation, but occurred independent of these areas as well. This morphologic pattern suggests that subacute inflammation may have been related to or exacerbated by alveolar proteinosis and acute inflammation.

Chronic inflammation was seen in animals sacrificed after the recovery period. It was usually focal and subcapsular. It consisted of interstitial fibrosis, mononuclear cell infiltration, and sometimes hyperplasia of alveolar or bronchiolar epithelium. Cholesterol clefts were also present in many of these foci.

Spleen

Extramedullary hematopoiesis consisted of increased hematopoietic tissue in sinusoids of the spleen.

Hemosiderin pigment was represented by golden-brown granular pigment filling the cytoplasm of macrophages in sinusoids.

Liver

Hepatocyte necrosis consisted of individual or small clusters of hepatocytes which were pyknotic. These foci were often infiltrated by a few macrophages and lymphocytes.

Hemosiderin pigment was a granular golden-brown pigment found in Kupffer cells.

Kupffer cell hypertrophy was characterized by enlargement of sinusoidal Kupffer cells. The enlargement was due to pale brown material, not identifiable as hemosiderin, in the cytoplasm. Hyperplasia was diagnosed when Kupffer cell numbers appeared to be increased.

Subacute inflammation in the liver occurred focally around small veins. There were usually hemosiderin-laden macrophages present, but small mononuclear cells and neutrophils were

Third Draft Pathology Report Toxicology Research Laboratory Study Number 097

also present. These foci tended not to extend into the surrounding parenchyma and were not related to hepatocyte necrosis.

Thymus

Lymphocyte depletion was characterized by a decrease in cortical lymphocytes. This varied from a pale-staining cortex with increased pyknotic lymphocytes to distinct thinning of the cortex. The diagnosis of lymphocyte depletion is analogous to thymic atrophy.

Bone Marrow

Hypercellularity was diagnosed when hematopoietic cells in the marrow were increased, replacing fat cells.

Kidney

Nephrocalcinosis refers to focal deposits of laminated purple mineral found within renal tubules in the cortico-medulary zone or renal papilla.

The remainder of the diagnoses used in this study were considered to be self-explanatory and, thus, were not discussed in this section.

Histopathology Findings

Lungs

Among animals sacrificed at the end of dosing, alveolar proteinosis was diagnosed in 0 out of 4, 2 out of 4, and 4 out of 4 males, and in 0 out of 4, 4 out of 4, and 4 out of 4 females in the low, middle, and high dose groups, respectively. Mean group severity scores for this change were 0.00, 0.50, and 2.50 in males, and 0.00, 1.00, and 2.00 in females in the low, middle, and high dose groups, respectively. Alveolar proteinosis was not diagnosed in males or females in the control group sacrificed at the end of dosing. Alveolar proteinosis did not occur in males sacrificed after the recovery period. This change did occur in 2 out of 4 females in the high dose group but not in any other females sacrificed after the recovery period. The mean group severity score for this change in high dose recovery females was 0.50, as the change was of minimal severity in each affected animal. The incidence and mean group severity scores for alveolar proteinosis in animals sacrificed at the end of dosing were interpreted as consistent with a dose-related response. This observation, in conjunction with resolution (males) or near resolution (females) of this change in animals sacrificed after the recovery period, indicates alveolar proteinosis to be a test article-related change.

Subacute inflammation in the lungs occurred in control and in all treated groups in both males and females. Among animals sacrificed at the end of dosing, this change occurred in 1 out of 4, 2 out of 4, 4 out of 4, and 4 out of 4 males, and in 2 out of 4, 4 out of 4, 4 out of 4, and 4 out of 4 females in the control, low, middle, and high dose groups, respectively. Mean group severity scores for this change in these animals were 0.25, 0.50, 2.50, and 3.25 in males and 1.00, 1.25, 2.75, and 2.25 in females in the control, low, middle, and high dose groups, respectively. Among animals sacrificed after the recovery period, this change occurred in 2 out of 4, 2 out of 4, 3 out of 4, and 4 out of 4 males, and in 3 out of 4, 1 out of 4, 4 out of 4, and 4 out of 4 females in the control, low, middle, and high dose groups, respectively. Mean group severity scores for these animals were 0.50, 0.50, 0.75, and 1.25 in males, and 0.75, 0.25, 1.00, and 1.50 in females in the control, low, middle, and high dose groups, respectively. Subacute inflammation can occur as a spontaneous lesion in the lungs of control or untreated animals. The cause of the inflammation in such animals is usually unknown, but in dogs it can occur in response to parasite larval migration in neonatal or juvenile puppies. It can also result from inhaled particulates or biological agents. There is a clear increase in incidence and severity of this change in middle and high dose males and females sacrificed at Third Draft Pathology Report Toxicology Research Laboratory Study Number 097

the end of dosing compared to controls. Though less clearly so than in the middle and high dose females, the incidence and mildly increased mean group severity score for this change in low dose females as compared to controls may also represent a test article-related response. The small increases in incidence and mean group severity in control animals sacrificed after the recovery period as compared to those sacrificed at the end of dosing are probably due to the increased age of the recovery dogs. The differences in incidence and mean group severity of this change between control and treated recovery animals are less than the differences in animals sacrificed at the end of dosing. This change is clearly still more severe in high dose than in control animals sacrificed at the end of the recovery period, indicating that resolution of subacute inflammation in the lung was not complete after the 13 week recovery period. Resolution of this change has been substantial during the recovery period, though, as incidence and mean group severity scores for this change in low and middle dose recovery animals are not clearly different from those of control recovery animals. For all of these reasons, subacute inflammation in the lungs of males and females was interpreted as a spontaneous process that was exacerbated by treatment with the test article. It was interpreted as a test article-related change that had not completely resolved by the end of dosing.

Chronic inflammation in the lungs was observed only in animals sacrificed after the recovery period. In males sacrificed after the recovery period, chronic inflammation in the lungs occurred in 2 out of 4 and 3 out of 4 animals in the middle and high dose groups, with mean group severity scores of 0.75 and 1.00, respectively. In females sacrificed at this time, this change occurred in 1 out of 4, 1 out of 4, 2 out of 4, and 0 out of 4 animals in the control, low, middle, and high dose groups, with mean group severity scores of 0.50, 0.25, 0.50, and 0.00, respectively. Chronic inflammation was focal or multifocal, and was usually subcapsular in the lungs. It was not necessarily related to areas of subacute inflammation in animals sacrificed after the recovery period. A possible relationship of chronic inflammation to alveolar proteinosis and subacute inflammation can only be speculated on, as chronic inflammation did not occur in animals sacrificed at the end of dosing. Such a relationship seems likely, however, as alveolar proteinosis had largely resolved after the recovery period and no other change that could have resulted in chronic inflammation was noted in animals sacrificed at the end of dosing. For these reasons, chronic inflammation in recovery animals was interpreted as part of the resolution process of alveolar proteinosis and was, thus, secondary to a direct test article-related change.

Spontaneous alveolar proteinosis has been described in the Fischer 344 rat, but its causes are unknown. Altered vascular permeability and abnormal surfactant production and degradation have been suggested as possible causes of this change. The clinical and anatomic pathology observations in this study do not allow identification of the specific mechanism of injury that lead to the features described as alveolar proteinosis. They do, however, suggest that increased vascular permeability in the pulmonary microvasculature may have been involved in the development of this change. The amorphous to fibrillar eosinophilic material in the alveoli is consistent with fibrin that would leak into the alveoli as fibrinogen if vascular permeability were increased. The large foamy cells, also in the alveoli, are macrophages attempting to remove this fibrin by phagocytosis. Neutrophils present in this change may have migrated from capillaries in response to chemoattractants released during the primary injury. These features are consistent with pulmonary edema due to toxic alteration of the pulmonary microvascular or epithelial membrane resulting in alveolar fluid that is rich in fibrinogen and other plasma proteins.² Mechanisms by which such toxic changes may occur have been described for cytotoxic and non-cytotoxic drugs. These include injury to the oxidant/antioxidant, immunological, matrix repair, and protease/antiprotease systems in the lungs, and injury to the central nervous system.^{3,4} Oxidative injury in the lung is a likely mechanism by which alveolar proteinosis developed in these animals, as there is other evidence that the test article causes oxidative injury. This evidence is primarily the occurrence of

Third Draft Pathology Report
Toxicology Research Laboratory
Study Number 097

statistically significant methemoglobin formation in the middle and high dose males and females at weeks 2, 4, 8, and 13. Both methemoglobin formation and oxidant/antioxidant system injury in the lung have been associated with superoxide anion and hydrogen peroxide formation.^{3,4,5} Subacute inflammation in the lung may occur as a spontaneous lesion but was increased in incidence and severity in a dose-related manner in this study. This increase was considered to be most likely related to the diffuse lung injury that resulted in alveolar proteinosis. For these reasons, and due to incidence and mean group severity scores at the end of dosing and after the recovery period, alveolar proteinosis and subacute inflammation in the lungs were interpreted as test article-related changes. Chronic inflammation in the lungs occurred only in recovery animals. The morphologic features of the chronic inflammation were consistent with it representing the resolution of alveolar proteinosis, and as such, this change was interpreted as a secondary test article-related change. Though the chronic inflammation in the lung did contain fibrosis, this was a focal change, usually subcapsular in location and was minimal to mild in severity. For these reasons, it seems most likely that chronic inflammation would have little negative long-term effect on pulmonary function. Studies of longer duration would be necessary to verify or refute this interpretation, though. The chronic inflammation that occurred in the lung of one female in the control recovery group was considered incidental. This was a focal interstitial area of chronic inflammation lacking the cholesterol clefts seen in treated dogs. The cause of chronic lung inflammation in this dog was not evident. The acute inflammation that occurred in one low dose recovery female was a focal change of minimal severity. It was considered incidental and most likely a response to an inhaled microbe or irritant.

Spleen

Among animals sacrificed at the end of dosing, deposition of hemosiderin in the spleen was diagnosed in 0 out of 4, 1 out of 4, 1 out of 4, and 3 out of 4 males, and in 0 out of 4, 0 out of 4, 3 out of 4, and 4 out of 4 females in the control, low, middle, and high dose groups, respectively. Mean group severity scores for this finding in these animals were 0.00, 0.25, 0.50, and 1.00 in males, and 0.00, 0.00, 1.00, and 1.25 in females in the control, low, middle, and high dose groups, respectively. Among animals sacrificed at the end of the recovery period, this change occurred in 2 out of 4, 1 out of 4, 1 out of 4, and 2 out of 4 males, and in 1 out of 4, 0 out of 4, 3 out of 4, and 3 out of 4 females in the control, low, middle, and high dose groups, respectively. Mean group severity scores for this change in these animals were 0.75, 0.25, 0.25, and 0.50 in males, and 0.25, 0.00, 0.75, and 1.00 in females in the control, low, middle, and high dose groups, respectively.

Extramedullary hematopoiesis (EMH) was observed in the spleen in males and females in the middle and high dose groups that were sacrificed at the end of dosing. In these animals, EMH occurred in 1 out of 4 and 2 out of 4 males, and in 1 out of 4 and 3 out of 4 females in the middle and high dose groups, respectively. Mean group severity scores for this change in these animals were 0.25 and 0.50 in males, and 0.25 and 1.25 in females in the middle and high dose groups, respectively. This change did not occur in males or females in the control and low dose groups sacrificed at the end of dosing, or in any animals sacrificed after the recovery period.

Excess iron in the body is normally stored in the liver, spleen, and bone marrow. These stores are visible by light microscopy as hemosiderin deposits which can be seen in these tissues in normal dogs. Iron is highly conserved in dogs; normal losses are small and are through the intestine. Consequently, absorption of iron by the small intestine is also in small amounts. Regulation of iron absorption is primarily by need. Iron released from erythrocytes by hemolysis or hemorrhage into body tissues is stored as increased hemosiderin. Iron stored in hemosiderin is readily available for use in erythropoiesis. Hemosiderin deposits which are increased due to an episode of hemolysis or hemorrhage will be gradually depleted over time.

Third Draft Pathology Report Toxicology Research Laboratory Study Number 097

The rate will be dependent on the amount of hemosiderin deposited and the rate at which erythropoiesis proceeds.⁶ In this study, incidence and severity of hemosiderin deposition in the spleen are consistent with a test article-related effect in high dose group males sacrificed at the end of dosing but only equivocally suggest a test article-related effect in low and middle dose group males at this time. In females sacrificed at the end of dosing, incidence and mean group severity scores indicate this to be a test article-related effect. Among females sacrificed after the recovery period, incidence and mean group severity scores indicate that resolution of the hemosiderin deposits was in progress but was not yet complete. Incidence and mean group severity scores for this change in males sacrificed after the recovery period are difficult to interpret, but are consistent with hemosiderin deposition in the spleen being a test article-related effect in males only in the high dose group sacrificed at the end of dosing. The difficulty in interpreting this change in male recovery dogs lies in the spontaneous occurrence of this change in dogs. The deposition of hemosiderin in the spleen indicates increased destruction of erythrocytes. This is also indicated by the incidence and mean group severity scores for EMH in males and females sacrificed at the end of dosing. The low mean group severity scores for these changes, however, indicate that the increase in erythrocyte destruction was mild and suggest that clinical anemia, if present, was mild. Both hemosiderin deposition and EMH in the spleen were interpreted as secondary to increased erythrocyte destruction.

Liver

Among animals sacrificed at the end of dosing, deposition of hemosiderin pigment was diagnosed in the liver in 0 out of 4, 0 out of 4, 2 out of 4, and 1 out of 4 males, and in 0 out of 4, 1 out of 4, 2 out of 4, and 4 out of 4 females in the control, low, middle, and high dose groups, respectively. Mean group severity scores for this change in these animals were 0.00, 0.00, 0.75, and 0.75 in males, and 0.00, 0.25, 0.50, and 2.25 in females in the control, low, middle, and high dose groups, respectively. Among animals sacrificed after the recovery period, this change was diagnosed only in the middle and high dose groups. This change occurred in 1 out of 4 and 2 out of 4 males, and in 4 out of 4 and 3 out of 4 females, with mean group severity scores of 0.25 and 0.75 in males, and 1.00 and 1.25 in females in the middle and high dose groups, respectively.

Kupffer cell hypertrophy was diagnosed in males and females sacrificed after the dosing period but not in those sacrificed after the recovery period. Among animals sacrificed at the end of dosing, this change occurred in 1 out of 4 and 2 out of 4 males, and in 1 out of 4 and 4 out of 4 females, with mean group severity scores of 0.25 and 1.00 in males, and 0.50 and 2.00 in females in the middle and high dose groups, respectively. There were no changes in Kupffer cells recorded for recovery animals.

Subacute inflammation in the liver was diagnosed in animals sacrificed at the end of dosing in 0 out of 4, 1 out of 4, and 1 out of 4 males, and in 0 out of 4, 0 out of 4, 1 out of 4, and 4 out of 4 females in the control, low, middle, and high dose groups, respectively. Mean group severity scores for this change were 0.00, 0.25, 0.25, and 0.75 in males, and 0.00, 0.00, 0.50, and 1.75 in females in the control, low, middle, and high dose groups, respectively. Subacute inflammation in the liver had resolved by the end of the recovery period, as it was not diagnosed in recovery animals.

Deposition of hemosiderin pigment, hypertrophy of Kupffer cells, and subacute inflammation were interpreted to be pathophysiologically-related changes. Like hemosiderin deposition and EMH in the spleen, they are consistent with responses to increased destruction of erythrocytes which may have been associated with mild clinical anemia. For these reasons, deposition of hemosiderin pigment, Kupffer cell hypertrophy, and subacute inflammation in the liver were interpreted as secondary to increased erythrocyte destruction, rather than as direct test article-related effects. Subacute inflammation and Kupffer cell hypertrophy had resolved by the end

Third Draft Pathology Report Toxicology Research Laboratory Study Number 097

of the recovery period. Hemosiderin pigment had not resolved at the end of the recovery period.

Hepatocyte necrosis occurred in 2 out of 4 high dose males sacrificed at the end of dosing but did not occur in any other animals in this study. It is not clear whether this change is incidental or whether it is related to other changes in the liver and, thus, a test article-related change. This is because the necrosis was of minimal severity and occurred in very small, widely and randomly distributed foci.

Thymus

Depletion of thymic lymphocytes occurred only in animals sacrificed at the end of dosing. Among these animals, this change occurred in 0 out of 4 and 3 out of 4 males, and in 1 out of 4 and 1 out of 4 females, with mean group severity scores of 0.00 and 1.75 in males, and 0.50 and 0.25 in females in the middle and high dose groups, respectively. Depletion of thymic lymphocytes is well known as a manifestation of generalized toxicity and stress. The lungs, spleen, and liver in the dogs in this study all had changes interpreted as direct or secondary to test article-related changes. For these reasons, thymic lymphocyte depletion was interpreted as secondary to generalized toxicity or stress.

Bone Marrow

Bone marrow hypercellularity was diagnosed only in animals sacrificed at the end of dosing. Among these animals, this change occurred in 1 out of 4, 1 out of 4, and 4 out of 4 males, and in 0 out of 4, 4 out of 4, and 4 out of 4 females in the low, middle, and high dose groups, respectively. Mean group severity scores for this change in these animals were 0.25, 0.25, and 1.00 in males, and 0.00, 1.00, and 1.00 in females in the low, middle, and high dose groups, respectively. This change did not occur in control males or females sacrificed at the end of dosing. Evaluation of rib bone marrow smears revealed a significant decrease in M:E ratios in middle and high dose males and females (see Appendix I). A decrease in M:E ratios can result from an absolute decrease in myeloid cells or from an absolute increase in erythroid cells in the bone marrow. Results of evaluation of rib bone marrow sections were considered consistent with the results of bone marrow smear evaluations, and indicated that the decreased M:E ratios were due to increased erythroid cells rather than to decreased myeloid cells. These observations are also consistent with observations in the liver and spleen that suggested hemolytic anemia. For these reasons, bone marrow hypercellularity and decreased M:E ratios were interpreted as secondary to increased erythrocyte destruction that may or may not have been associated with clinical anemia. Bone marrow, in histologic section and in smears, had returned to normal in males and in females after the recovery period.

Kidney

Nephrocalcinosis is a common spontaneous change which occurs in the kidneys of a variety of species, including dogs. In this study, nephrocalcinosis occurred in one or both kidneys of animals in the control and all treated groups. Because the incidence of this change was similar in control and treated animals, nephrocalcinosis was considered not related to the test article.

Other Lesions

All other lesions seen were considered to be incidental changes not related to the test article.

In summary, the principal histopathology findings in this study were those in the lungs and those in spleen, liver, and bone marrow suggesting increased erythrocyte destruction. The findings in the lungs were distinct morphologically, but the mechanism (mechanisms) of their development was (were) less clear. The two most likely causes would be either alteration of vascular permeability, causing persistent alveolar edema, or the process of surfactant production and degradation. Changes present in the spleen, liver, and bone marrow were considered to be related to increased erythrocyte destruction that may or may not be have been severe enough to cause

DRAFT

Third Draft Pathology Report Toxicology Research Laboratory Study Number 097

clinical anemia. Changes in these tissues were thus considered secondary, rather than direct, test article-related findings. The degree of lymphocyte depletion which occurred in the thymus was probably secondary to generalized toxicity or to stress.

CONCLUSIONS

Under the conditions of this study, oral administration of WR 238605 was associated with changes in the lungs, spleen, liver, bone marrow, and thymus. Alveolar proteinosis and subacute inflammation were direct test article-related changes which occurred in the lungs of animals sacrificed at the end of dosing. Alveolar proteinosis had resolved in males and almost resolved in females by the end of the recovery period. Chronic inflammation, which occurred in recovery animal lungs, was interpreted as representing part of the resolution of alveolar proteinosis.

Hemosiderin deposition in the spleen and liver, EMH in the spleen, Kupffer cell hypertrophy and subacute inflammation in the liver, and increased erythroid cells in the bone marrow were interpreted as secondary to increased erythrocyte destruction, which may or may not have resulted in clinical anemia. These changes were, thus, considered to be secondary test article-related effects.

Depletion of thymic lymphocytes was a test article-related change in males and females and was considered to be most likely secondary to generalized toxicity or stress.

Direct test article-related effects, alveolar proteinosis and subacute inflammation in the lungs, were clearly present at the end of dosing. Subacute inflammation in the lungs was an equivocal effect in low dose females sacrificed at the end of dosing. These effects had largely, but not completely, resolved by the end of the recovery period. Effects considered secondarily related to the test article in middle and high dose groups included chronic inflammation in the lungs of recovery animals, and changes in the liver, spleen, bone marrow, and thymus present in animals sacrificed at the end of dosing. Except for hemosiderin deposition, secondary effects in the liver, spleen, bone marrow, and thymus had resolved by the end of the recovery period. For these reasons, the noeffect level in this study was equivocal, but was interpreted to probably be the low dose (0.1 mg base/kg/day).

Michael J	. Tomlinson,	DVM,	Ph.D.
Diplomate			

Date

¹ G.A. Boorman and S.L. Eustis, "Lung," <u>Pathology of the Fischer Rat. Reference Atlas</u>, eds. G.A. Boorman, S.L. Eustis, M.R. Elwell, C.A. Montgomery, Jr., and W.F. MacKenzie, (San Diego: Academic Press, Inc., 1990), pp. 345-346.

² C.E. Cross, G.H. Parsons, A.B. Gorin, and J.A. Last, "Pulmonary Edema: Emphasis on Physiologic and Toxicologic Considerations," <u>Mechanisms in Respiratory Toxicology</u>, eds. H. Witschi and P. Neshesheim, (Boca Raton: CRC Press, 1982), Volume I, pp. 219-246.

³ J.A.D. Cooper, Jr., D.A. White, and R.A. Matthay, "Drug Induced Pulmonary Disease, Part 1: Cytotoxic Drugs," Am Rev Respir Disease, 133:321-340, 1986.

⁴ J.A.D. Cooper, Jr., D.A. White, and R.A. Matthay, "Drug Induced Pulmonary Disease, Part 2: Non-cytotoxic Drugs," Am Rev Respir Disease, 133:488-505, 1986.

⁵ N.C. Jain, <u>Schalm's Veterinary Hematology</u>, Fourth Edition, (Philadelphia: Lea & Febiger, 1986), pp. 643-645. ⁶ N.C. Jain, <u>Schalm's Veterinary Hematology</u>, Fourth Edition, (Philadelphia: Lea & Febiger, 1986), pp. 382-383.

TABLE I

SUMMARY OF EXPERIMENTAL DESIGN

	Dose Level	Number	of Dogs
Group	(mg base/kg/day)	Male	Female
1	0	4 + 4*	4 + 4*
2	0.1	4 + 4*	4 + 4*
3	2.0	4 + 4*	4 + 4*
4	6.0	4 + 4*	4 + 4*

^{*} Recovery animals.

TABLE II

PROTOCOL-REQUIRED TISSUES

Adrenal glands Aorta (thoracic) Brain (fore-, mid-, and hind-) Cecum Colon Diaphragm Duodenum Esophagus Eyes and optic nerve Heart Gallbladder Gross lesions Ileum Jejunum Kidneys Liver Lungs/bronchi Lymph nodes (submandibular	Ovaries Pancreas Pituitary gland Prostate Rib with costochondral junction Rib with marrow Salivary gland (mandibular) Sciatic nerve Skin Spinal cord (thoracic) Spleen Stomach Testes with epididymides Thymus Thyroid gland with parathyroids Tongue Tonsil Trachea
and mesenteric)	Ureter
Mammary gland	Urinary bladder
Muscle, skeletal	Uterus

DRAFT

PATHOLOGY ASSOCIATES, INC. THIRTEEN WEEK ORAL TOXICITY STUDY OF WR 238605 WITH A THIRTEEN WEEK RECOVERY PERIOD IN DOGS TOXICOLOGY RESEARCH LABORATORY, STUDY NUMBER 097

Report Codes Table

A. Codes applying to organs

- N Tissues within normal histological limits
- A Autolysis precluding adequate evaluation
- P Paired organ missing
- U Tissues unsuitable for complete evaluation
- S Tissues not applicable to animal
- * Tissues not required by protocol

B. Codes applying to microscopic diagnoses

- 1 minimal
- 2 mild
- 3 moderate
- 4 marked
-) focal
-] locally extensive
- > multifocal
- P Present
- B Neoplasm, benign
- M Neoplasm, malignant without metastasis
- C Neoplasm, malignant with metastasis
- X Metastatis site (+)
- No data entered

ORAFT

Third Draft Pathology Report Toxicology Research Laboratory Study Number 097

HISTOPATHOLOGY TABLES

ABBREVIATION LIST

Cytopl - Cytoplasm

Epith - Epithelium

LN - Lymph node

MBK - Mg base/kg/day

R - Recovery

Vacuo - Vacuolation

Third Draft Pathology Report Toxicology Research Laboratory Study Number 097

SECTION II

PROJECT SUMMARY TABLE

Project Summary Table

PROJECT ID. NO: TRL097 MEEKS: 14-27		FATES: T SEX: MAL	erminal Sacr E	ifice				PA	GE 16
GROUP: NUMBER OF ANIMALS:		0.0mbk 4	0.1mbk	2.0mbk 4	6.0mbk 4	0.0mbk-R 4	0.1mbk-R 4	2.0mbk-R 4	6.0mbx-R 4
-		* %	* %	* %		* *	* %		
BRAIN (FORE)	# Ex	4	4.	4	4	0	0	0	0
THORACIC CORD	# Ex	4	4	4	4	0	0	0	0
BRAIN (MIO)	# Ex	4	4	4	4	0	0	0	0
BRAIN (CEREBELLUM)	# Ex	4	4	4	4	0	0	0	0
PONS	# Ex	4	4	4	4	0	0	0	0
HEART	# E×	4	4	4	4	0	0	0	0
AORTA	# Ex	4	4	4	4	0	0	0	0
TRACHEA	# Ex	4	4	4	4	0	0	0	0
ESOPHAGUS	# Ex	4	4	4	4	0	0	0	0
LUNG	# E×	4	4	4	4	4	4	4	4
Alveolar proteinosis		0 (0)	0 (0)	2 (50)	4 (100)	0 (0)	0 (0)	0 (0)	0 (0)
Infiltrate, macrophage		0 (0)	0 (0)	0 (0)	0 (0)	1 (25)	0 (0)	2 (50)	2 (50)
Inflammation, chronic		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (50)	3 (75)
Inflammation, subacute Pigment, hemosiderin		1 (25) 0 (0)	2 (50) 0 (0)	4 (100) 0 (0)	4 (100) 0 (0)	2 (50) 0 (0)	2 (50) 0 (0)	3 (75) 1 (25)	4 (*50) 0 (0)
KIDNEY, RIGHT	# Ex	4	4	4	4	0	0	0	0
Nephrocalcinosis		4 (100)	3 (75)	4 (100)	2 (50)	0	0	0	0
Renal tubule, casts, prote	inic	0 (0)	0 (0)	1 (25)	0 (0)	0	0	0	0

Project Summary Table

PROJECT ID. NO: TRL097 WEEKS: 14-27			ATES: T EX: MAL		nal Sacr	ifice	•					3	1		PA	GE 17	
GROUP: NUMBER OF ANIMALS:		0.	0mbk 4	0.	1mbk	2	. Ombk	6.	Ombk 4	0.0m	bk-R 4	0.1m	bk-R	2.0m	bk-R 4	6 . Dri	tx-R
									_					-			
KIDNEY, LEFT	# Ex	# 4	*	#	*	#	*	# 4	*	# 0	\$	0	*	0	*	# 0	*
Nephrocalcinosis	M LY	3	(75)	2	(50)		(100)	2	(50)	0		0		0		0	
Nephropathy		0	(0)	1	(25)	0	(0)	0	(0)	0		0		0		0	
Renal tubule, casts, protein	nic	0	(0)	0	(0)	1	(25)	1	(25)	0		0		0		0	
SPLEEN	# Ex	4		4		4		4		4		4		4		4	
Extramedullary hematopoiesis	5	0	(0)	0	(0)	1	(25)	2	(50)	0	(0)	0	(0)	0	(0)	0	(0)
Pigment, hemosiderin		0	(0)	1	(25)	1	(25)	3	(75)	2	(50)	1	(25)	1	(25)	2	50)
Siderofibrotic plaque		0	(0)	1	(25)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)
PANCREAS	# Ex	4		4		4		4		0		0		0		0	
DUODENUM	# Ex	4		4		4		4		0		0		0		0	
LIVER	# Ex	4		4		4		4		4		4		4		4	
Hepatocyte, necrosis		0	(0)	0	(0)	0	(0)	2	(50)	0	(0)	0	(0)	0	(0)	0	(0)
Inflammation, subacute		0	(0)	1	(25)	1	(25)	1	(25)	0	(0)	0	(0)	0	(0)	0	(0)
Kupffer cell, hyperplasia		0	(0)	0	(0)	1	(25)	2	(50)	0	(0)	0	(0)	0	(0)	0	(0)
Kupffer cell, hypertrophy		0	(0)	0	(0)	1	(25)	2	(50)	0	(0)	0	(0)	0	(0)	0	(0)
Nodular hyperplasia		0	(0)	1	(25)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)
Pigment, hemosiderin		0	(0)	0	(0)	2	(50)	1	(25)	0	(0)	0	(0)	1	(25)	2	(50)
GALLBLADOER	# Ex	4		4		4		4		0		0		0		0	
Infiltrate, cellular		0	(0)	1	(25)	0	(0)	0	(0)	0		0		0		0	
ADRENAL GLAND	# Ex	4		4		4		4		0		0		0		0	
SALIVARY GLAND	# Ex	4		4		4		4		0		0		0		0	
LYMPH NODE, SUBMANDIBULAR	# Ex	4		4		4		4		0		0		0		0	

Project Summary Table

PROJECT ID. NO: TRL097 WEEKS: 14-27			ATES: TO		al Sacr	ifice							3	T	PA	GE 18	
GROUP: NUMBER OF ANIMALS:		0.	0mbk 4	0.	1mbk 4	2.0	0mbk 4	6.	0mbk 4	O . Omit	ok-R 4	0.1ml	ok−R 4	2.0m	bk-R 4	6.0mt	bk-R 4
JEJUNUM	# Ex	# 4	*	# 4	*	4	8	# 4	*	# O	8	ø O	8	0	2	0	*
COLON	# Ех	4		4		4		4		0		0		0		0	
TONSIL	# Ex	4		4		4		4		0		0		0		0	
URETER	# Ex	4		4		4		4		0		0		0		O	
ILEUM	# Ex	4		4		4		4		0		0		0		0	
LYMPH NODE, MESENTERIC	# Ex	4		4		4		4		0		0		0		0	
TONGUE Granuloma, foreign body	# Ex	4	(0)	4	(25)	4 0	(0)	0	(0)	0		0		0		0	
DIAPHRAGM	# Ex	4		4		4		4		0		0		0		0	
THYMUS Depletion, lymphocyte	# Ex	4	(0)	4	(0)	4	(0)	4	(75)	4	(0)	4	(0)	0	(0)	4	(0)
SKELETAL MUSCLE Inflammation, subacute	# Ex	4	(25)	4	(0)	4 0	(0)	4	(0)	0		0		0		0	
THYROID GLAND Infiltrate, cellular	# E×	3	(0)	4	(25)	4 0	(0)	4	(0)	0		0		0		0	
PARATHYRCID GLAND	# Ex	3		4		4		4		o		0		0		0	

Project Summary Table

PROJECT ID. NO: TRL097 WEEKS: 14-27			ATES: T		al Sacri	fice	•				3 /		3	77	PA	GE 19
GROUP: NUMBER OF ANIMALS:		0.	Ombk 4	0.	1mbk 4	2.	Ombk 4	6.	Ombk 4	0.0mbk		0.1mb	J ok-R 4	2.0mb	k−R 4	6.0mbx=R
		*	*	*	*		*		8		8		*	-	*	* *
PITUITARY GLAND Craniopharyngeal duct, cyst	# Ex	1	(25)	0	(0)	0	(0)	1	(25)	0		0		0		0
CECUM	# Ex	4		4	,	4		4		0		0		0		0
STOMACH	# E×	4		4		4		4		0		0		0		0
URINARY BLADDER	# E×	4		4		3		4		0		0		0		0
TESTIS Germinal epith, degeneration	# Ex	4	(0)	4	(0)	4	(25)	4	(25)	0		0		0		0
EPIDIDYMIS Hypospermia	# Ex	0	(0)	4 0	(0)	4	(25)	4	(0)	0		0		0		0
PROSTATE Atrophy	# Ex	4	(0)	4	(0)	3	(0)	4	(25)	0		0		0		0
MAMMARY GLAND	# Ex	3		4		4		2		0		0		0		0
SKIN Follicle, inflammation	# Ex	1	(25)	4	(0)	4	(0)	3	(0)	0		0		0		0
SCIATIC NERVE	# Ex	4		4		4		4		0		0		0		0
EYE	# Ex	4		4		4		4		0		0		0		0
OPTIC NERVE	# Ex	4		4		4		4		0		0		0		0

Project Summary Table

SUMMARY: Incidence of NEOPLASTIC and NON-NEOPLASTIC Microscopic Findings

PROJECT ID. NO: TRL097 WEEKS: 14-27			NTES: T		nal Sacr	ifice	•						C.		PA	Œ 20	
GROUP: NUMBER OF ANIMALS:		0.0	Ombk 4	0.	1mbk 4	2.	0mbk 4	6.	0mbk 4	0.0mb	ok-R 4	0.1ml	ok-R 4	2 . Omb	ok-R 4	6 . Omc	ca-R
RIB	# Ex	# 4	8	# 4	*	4	*	# 4	*	0	*	0	x	0	1	0	*
BONE MARROV Hypercellular	# Ex	4	(0)	4	(25)	4	(25)	4	(100)	4	(0)	4	(0)	4	(0)	0	(0)
COSTOCHONDRAL JUNCTION	# Ex	4		4		4		4		0		0		0		0	

03-Sep-1993

Project Summary Table

SUPPARY: Incidence of NEOPLASTIC and NON-NEOPLASTIC Microscopic Findings

PROJECT ID. NO: TRL097 WEEKS: 14-27	FATES:		nal Sacr	ifice							3	T	PA	Œ 21	
GROUP: NUMBER OF ANIMALS:	0.0mbk 4	0.	1mbk 4	2.0m		6.0	Ombk 4	0 . Omt	ok-R 4	0.1m	bk-R 4	2.0m	bk-R 4	6.0m	bx-R
OTHER TISSUES AND LESIONS:	1 8		*		*		*		*		*		*		*
LN, MEDIASTINAL - Hyperplasia	1 (25)	0	(0)	1 (25)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)

20-Aug-1993

Project Summary Table

PROJECT ID. NO: TRL097 WEEKS: 14-27			ATES: T		al Sacr	ifice							3	T	PA	GE 22	
GROUP: NUMBER OF ANIMALS:		0.0	Ombk 4	0.	1mbk 4	2.	Ombk 4	6.	Ombk 4	0 . Om	bk-R 4	0.1m	lbk−R 4	2.0m	bk-R 4	6.0m	ta-2
BRAIN (FORE)	# Ex	*	*	# 4	*	4	*	4	*	#	*	0	8	#	*	#	1
THORACIC CORD	# Ex	4		4		4		4		0		0		-0		0	
BRAIN (MID)	# Ex	4		4		4		4		0		0		0		0	
BRAIN (CEREBELLUM)	# Ex	4		4		4		4		0		0		0		0	
PONS	# Ex	4		4		4		4		0		0		0		0	
HEART	# Ex	4		4		4		4		0		0		0		0	
AORTA	# Ex	3		4		4		4		0		0		0		0	
TRACHEA Infiltrate, cellular	# Ex	4 0	(0)	4	(25)	4	(25)	4	(0)	0		0		0		0	
ESOPHAGUS	# Ex	4		4		4		4		0		0		0		0	
LUNG Alveolar proteinosis Heteropic bone Infiltrate, macrophage Inflammation, acute Inflammation, chronic Inflammation, subacute Pigment, hemosiderin	# Ex	4 0 0 0 0 0 0 2	(0) (0) (0) (0) (0) (50)	4 0 0 0 0 0 0	(0) (0) (0) (0) (0) (100)	0 0 0	(100) (0) (0) (0) (0) (100) (0)	0 0 0	(100) (0) (0) (0) (0) (100) (0)	4 0 0 0 0 1 3	(0) (0) (0) (0) (25) (75) (0)	4 0 0 0 1 1 1 0	(0) (0) (25) (25) (25) (25)		(0) (0) (25) (0) (50) (100) (0)	4 2 1 2 0 0 4	(50 (25 (50 (0 (00)
KIDNEY, RIGHT Cortex, infiltrate, cellula Nephrocalcinosis	# Ex	4 0 3	(0) (75)	4 1 3	(25) (75)	0	(0) (100)	0	(0) (100)	0		0		0		0 0	

Project Summary Table

PROJECT ID. NO: TRL097 WEEKS: 14-27		ATES: T EX: FEM	7.	al Sacr	ifice	e						3		PA	GE 23	
GROUP: NUMBER OF ANIMALS:	0.	Ombk 4	0.	1mbk	2.	. Ombk	6.	. Ombk	0.0m	bk-R 4	0.1m	bk-R	2.0n	nbk-R 4	6.0n	tok-R

KIDNEY, RIGHT # Ex	# 4	*	#	*	# 4	*	#	*	0	*	#	*	*	*		3
Renal tubule, casts, proteinic		(25)	0	(0)	0	(0)	0	(0)	0		0		0		0	
Tubular epith, vacuo, cytopl		(25)	0	(0)	0	(0)	0	(0)	0		0		0		0	
KIDNEY, LEFT # Ex	4		4		4		4		0		0		0		0	
Cortex, hemorrhage	0	(0)	0	(0)	1		0	(0)	0		0		0		0	
Nephrocalcinosis	2	(50)		(100)		(100)		(100)	0		0		0		0	
Renal tubule, casts, proteinic	1	*	0	(0)	1		2	(50)	0		0		0		0	
Tubular epith, vacuo, cytopl	1	(25)	0	(0)	0	(0)	0	(0)	0		0		0		0	
SPLEEN # Ex	4		4		4		4		4		4		4		4	
Capsule, scar	0	(0)	0	(0)	0	(0)	0	(0)	1	(25)	0	(0)	0	(0)	0	(0
Extramedullary hematopoiesis	0	(0)	0	(0)	1	(25)	3	(75)	0	(0)	0	(0)	0	(0)	0	(0
Pigment, hemosiderin	0	(0)	0	(0)	3	(75)	4	(100)	1	(25)	0	(0)	3	(75)	3	(75
PANCREAS # Ex	4		4		4		4		0		0		0		0	
DUODENUM # Ex	4		4		4		4		0		0		0		0	
LIVER # Ex	4		4		4		4		4		4		4		4	
Hepatocyte, vacuo, cytoplasm	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	1	(25)	0	(0)	1	(25
Inflammation, subacute	0	(0)	0	(0)	1	(25)	4	(100)	0	(0)	0	(0)	0	(0)	0	(0
Kupffer cell, hyperplasia	0	(0)	1	(25)	1	(25)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)
Kupffer cell, hypertrophy	0	(0)	0	(0)	1	(25)		(100)	0	(0)	0	(0)	0	(0)	0	(0)
Pigment, hemosiderin	0	(0)	1	(25)	2	(50)	4	(100)	0	(0)	0	(0)	4	(100)	3	(75)
GALLBLADOER # Ex	4	÷	4		4		4		0		0		0		0	
ADRENAL GLAND # Ex	4		4		4		4		0		0		0		0	
Cortex, cyst	0	(0)	0	(0)	1	(25)	0	(0)	0		0		0		0	
Cortex, vacuolation, cytoplasm	0	(0)	0	(0)	0	(0)	1	(25)	0		0		0		0	

Project Summary Table

											-						
PROJECT ID. NO: TRL097 WEEKS: 14-27			FATES: T SEX: FEM		nal Sacr	ifice	•						F	7	PA	GE 24	
GROUP: NUMBER OF ANIMALS:		0.	Ombk 4	0	. 1mbk 4	2	Ombk 4	6.	Ombk 4	0.0m	bk-R 4	0.1mb	bk−R 4	2.0ml	bk−R 4	6.Dm	tox-R
SALIVARY GLAND Infiltrate, cellular	∦ Ex	4 2	% (50)	4	% (25)	4	% (25)	4	% (25)	0	*	0	*	0	*	0	3
LYMPH NODE, SUBMANDIBULAR Hyperplasia	# Ex	4	(0)	4	(0)	4	(0)	4	(25)	0		0		0		0	
JEJUNUM	# Ex	4		4		4		4		0		0		0		0	
COLON	# Ex	4		4		4		4		0		0		0		0	
TONSIL	# Ex	4		4		4		4		0		0		0		0	
URETER	# Ex	4		4		4		4		0		0		0		0	
ILEUM Inflammation, acute	# Ex	4	(0)	4	(25)	4	(0)	4	(0)	0		0		0		0	
LYMPH NODE, MESENTERIC	∦ E×	4		4		4		4		0		0		0		0	
TONGLE	# Ex	4		4		4		4		0		0		0		0	
DIAPHRAGM	# Ex	4		4		4		4		0		0		0		0	
THYMUS Depletion, lymphocyte	# E×	4	(0)	4	(0)	4	(25)	4	(25)	4	(0)	0	(0)	4	(0)	4	(0)
SKELETAL MUSCLE	# Ex	4		4		4		4		0		0		0		0	

Project Summary Table

PROJECT ID. NO: TRL097 MEEKS: 14-27			ATES: T EX: FEM		nat Sacr	ifice	F						3	1	PA	GE 25	
GROUP: NUMBER OF ANIMALS:		0.0	Ombk 4	0	, 1mbk 4	2.	Ombk 4	6.	0mbk 4	0 . Omb	k⊣R 4	0.1ml	bk-R 4	2 , Omb	okR 4	6.0mc	x-R 4
			*		2		8		2		*		*			,	*
THYROID GLAND	Ex	4		4		4		4		0		0		0		0	
C-Cell, hyperplasia		0	(0)	1	(25)	0	(0)	0	(0)	0		0		0		0	
Follicular cell, vacuo, cytopi Infiltrate, cellular		0	(0)	0	(0) (0)	1	(0) (25)	0	(25) (0)	0		0		0		0	
PARATHYROID GLAND #	Ex	4		4		4		4		0		0		0		0	
PITUITARY GLAND #	Ex	4		4		4		3		0		0		0		0	
Chromophobe, vacuo, cytoplasm		0	(0)	0	(0)	0	(0)	1	(33)	0		0		0		0	
Craniopharyngeal duct, cyst		2	(50)	2	(50)	0	(0)	2	(67)	0		0		0		0	
CECUM #	Ex	4		4		4		4		0		0		0		0	
STOMACH #	Ex	4		4		4		4		0		0		0		0	
URINARY BLADDER	Ex	4		4		4		4		0		0		0		0	
Infiltrate, cellular		0	(0)	1	(25)	0	(0)	0	(0)	0		0		0		0	
OVARIES #	Ex	4		4		4		4		0		0		0		0	
UTERUS #	Ex	4		4		4		4		0		0		0		0	
Hemorrhage		0	(0)	0	(0)	1	(25)	0	(0)	0		0		0		0	
HAMMARY GLAND #	Ex	2		4		2		4		0		0		0		0	
SKIN #	Ex	4		4		4		4		0		0		0		0	
SCIATIC NERVE #	Ex	4		4		4		4		0		0		0		0	

Project Summary Table

SUMMARY: Incidence of NEOPLASTIC and NON-NEOPLASTIC Microscopic Findings

PROJECT IO. NO: TRL097 WEEKS: 14-27			ATES: TO		al Sacr	ifice		DS	AF] P/	NGE 26
GROUP: NUMBER OF ANIMALS:		0.	Ombik 4	0.	1mbk 4	2.0mbk 4	6.0mbk 4	0 . 0mbk -R 4	0.1mbk-R 4	2.0mmbk−R 4	6.0mbk-R 4
EYE	# Ex	# 4	*	# 4	*	# % 4	* *	# % 0	# % 0	0	# % 0
OPTIC NERVE	# Ex	4		4		4	4	0	0	0	0
RIB	# Ex	4		4		4	4	0	0	0	0
BONE MARROW Hypercellular	# Ex	4	(0)	0	(0)	4 4 (100)	4 (100)	4 0 (0)	4 0 (0)	0 (0)	4 0 (0)
COSTOCHONDRAL JUNCTION	# Ex	4		4		4	4	0	0	0	0

31-Aug-1993

Third Draft Pathology Report Toxicology Research Laboratory Study Number 097

DRAFT

SECTION III
SEVERITY SUMMARY TABLE

PROJECT ID. NO: TRL097 WEEKS: 14-27	FATES: Terminal Sacrifice SEX: MALE														P/	NGE 28	3
GROUP: NUMBER OF ANIMALS:		0 . Drr	ntok	0.	lmbk i		Omlok i		Ombk 4	O . Omt		0 . 1mb		2.0mt		6.0mt	×-₹ 4
BRAIN (FORE)	# Ex	# 4	SEV	4	SEV	#	SEV	4	SEV	0	SEV	0	SEV	0	SEV	0	SΞV
THORACIC CORD	# Ex	4		4		4		4		0		0		D		0	
BRAIN (MID)	# Ex	4		4		4		4		0		0		0		0	
BRAIN (CEREBELLUM)	# Ex	4		4		4	i.	4		0		0		0		0	
PONS	# Ex	4		4		4		4		0		0		0		0	
HEART	# Ex	4		4		4		4		0		0		D		0	
AORTA	# Ex	4		4		4		4		0		0		0		0	
TRACHEA	# Ex	4		4		4	*	4		0		0		0		0	
ESOPHAGUS	# Ex	4		4		4		4		0		0		0		0	
LUNG Alveolar proteinosis Infiltrate, macrophage Inflammation, chronic Inflammation, subacute Pigment, hemosiderin	∦ Ex	4 0 0 0 1	0.25	0 0 0 2 0	0.50	4 2 0 0 4	0.50	4 0 0 4 0	2.50	4 0 1 0 2	0.25	4 0 0 0 2	0.50	4 0 2 2 3 1	0.50 0.75 0.75 0.25	4 0 2 3 4 0	0.50 1.00 1.25
KIDNEY, RIGHT Nephrocalcinosis Renal tubule, casts, prote	∦ Ex	4 0	1.00	4 3 0	0.75	4 4 1	1.00	4 2 0	0.50	0		0		0		0	

^{*} Severity calculated by the number of tissues examined.

PROJECT ID. NO: TRL097 WEEKS: 14-27	F	FATES: T		nal Sacr	ifice	,					F	T	4	P	NGE 24	9	
GROUP:		0.0	mbk	0 1	Imbk	2 (mbk	6 F	mbk	0.0mb	Ŀ _D	0.1mb	Ŀ-D	2.0mb	مـ د	6. Orne	د ما
NUMBER OF ANIMALS:		4				4		4		4		4		4			4
			SEV		SEV		SEV	-	SEV		SEV		SEV		SEV		
KIDNEY, LEFT	# Ex	4	34	4	327	4	32.1	4	3CV	0	SEA	0	SEV	0	SIC V	0	3C.V
Nephrocalcinosis		3	0.75	2	0.50	4	1.00	2	0.50	0		0		0		0	
Nephropathy		0		1	0.25	0		0		0		0		0		0	
Renal tubule, casts, protei	nic	0		0		1	0.25	1	0.50	0		0		0		0	
SPLEEN	# Ex	4		4		4		4		4		4		4		4	
Extramedullary hematopoiesi	s	0		0		1	0.25	2	0.50	0		0		0		0	
Pigment, hemosiderin		0		1		1	0.50	3	1.00	2	0.75	1	0.25	1	0.25	2	:.50
Siderofibrotic plaque		0		1	0.25	0		0		0		0		0		0	
PANCREAS	∦ Ex	4		4		4		4		0		0		0		0	
DUODENUM	# Ех	4		4		4		4		0		0		0		0	
LIVER	# Ex	4		4		4		4		4		4		4		4	
Hepatocyte, necrosis	(7)	0		0		0		2	0.50	0		0		0		0	
Inflammation, subacute		0		1	0.25	1	0.25	1	0.75	0		0		0		0	
Kupffer cell, hyperplasia		0		0		1	0.25	2	0.50	0		0		0		0	
Kupffer cell, hypertrophy		0		0		1	0.25	2	1.00	0		0		0		0	
Nodular hyperplasia		0		1	0.25	0		0		0		0		0		0	
Pigment, hemosiderin		0		0		2	0.75	1	0.75	0		0		1	0.25	2	1.75
GALLBLADOER	# Ex	4		4		4		4		0		0		0		0	
Infiltrate, cellular		0		1	0.50	0		0		0		0		0		0	
ADRENAL GLAND	# Ex	4		4		4		4		0		0		0		0	
SALIVARY GLAND	# Ex	4		4		4		4		0		0		0		0	
LYMPH NODE, SUBMANDIBULAR	# Ex	4		4		4		4		0		0		0		0	

PROJECT ID. NO: TRL097 WEEKS: 14-27		FATES:	Terminal Sacr	ifice			FT	Р	AGE 30
GROUP: NUMBER OF ANIMALS:		0.0mbk 4	0.1mbk 4	2.0mbk 4	6.0mbk 4	0.0mbk-R 4	0 . 1mbk-R 4	2.0mbk-R 4	6.0mbk-R 4
JEJUNUM	# Ex	# SEV	SEV	# SEV	sev	# SEV 0	# SEV	# SEV	# SEV
COLON	# Ex	4	4	4	4	0	0	0	- 0
TONSIL	# Ex	4	4	4	4	0	0	0	0
URETER	# Ex	4	4	4	4	0	0	0	0
ILEUM	∦ Ex	4	4	4	4	0	0	0	0
LYMPH NODE, MESENTERIC	∦ Ex	4	4	4	4	0	0	0	0
TONGUE Granuloma, foreign body	# Ex	4 0	4 1 0.50	4	4 0	0	0	0	0
DIAPHRAGM	# Ex	4	4	4	4	0	0	0	0
THYMUS Depletion, lymphocyte	# Ex	4	4	4	4 3 1.75	4	4	4 0	4 0
SKELETAL MUSCLE Inflammation, subacute	# Ex	4 1 0.25	4	4	4	0 0	0	0	0
THYROID GLAND Infiltrate, cellular	# Ex	3	1 0.75	4	4 0	0	0	0	0
PARATHYROID GLAND	∦ Ex	3	4	4	4	0	0	0	0

PROJECT ID. NO: TRL097 WEEKS: 14-27		FATES: SEX:	Terminal Sac	rifice				D PA	GE 31
GROUP: NUMBER OF ANIMALS:		0.0mbk 4	0.1mbk 4	2.0mbk 4	6.0mbk 4	0.0mbk−R 4	0.1mbk≔R 4	2.0mbk-R 4	6.0mbk → 4
PITUITARY GLAND	# Ex	# SEV	∦ S€V	# SEV	# SEV	# SEV	# SEV	# SEV	# SEV
PITOTIANI GEARD	# 2.	•	•	•	•	Ü	o.	Ü	Ü
CECUM	# Ex	4	4	4	4	0	- 0	0	0
STOMACH	# Ex	4	4	4	4	0	0	0	0
URINARY BLADDER	# Ex	4	4	3	4	0	0	0	0
TESTIS Germinal epith, degenerat	# Ex	4	4	1 0.50	1 0.50	0	0	0	0
EPIDIDYMIS Hypospermia	# Ex	4	4 0	4 1 0.75	4	0	0 0	. 0	0
PROSTATE Atrophy	# Ex	4	4	3	4	0	0	0	0
MAMMARY GLAND	# Ex	3	4	4	2	0	0	0	0
SKIN Follicle, inflammation	# Ex	1 0.25	4 0	4	3	0	0	0	0
SCIATIC NERVE	# Ex	4	4	4	4	0	0	0	0
EYE	# Ex	4	4	4	4	0	0	0	0
OPTIC NERVE	# Ex	4	4	4	4	0	0	0	0

^{*} Severity calculated by the number of tissues examined.

Severity Summary Table

PROJECT ID. NO: TRL097 WEEKS: 14-27		FATES: 1	Terminat Sacr	rifice	[A F 1] F	AGE 32
GROUP: NUMBER OF ANIMALS:		0.0mbk 4	0.1mbk 4	2.0mbk 4	6.0mbk	0.0mbk-R 4	0.1mbk-R 4	2 . 0mbkR 4	6.0mbx -R 4
RIB	# Ex	# SEV	# SEV	# SEV	# SEV	∦ S€V 0	# SEV	# SEV	# SEV
BONE MARROW Hypercellular	# Ex	4 0	1 0.25	1 0.25	4 1.00	4 0	4	4	4
COSTOCHONDRAL JUNCTION	# E×	4	4	4	4	0	0	0	0

^{*} Severity calculated by the number of tissues examined.

03-Sep-1993

PROJECT ID. NO: TRL097 WEEKS: 14-27		FATES: T	Terminal Sacr TEMALE	ifice			1 F T	PAG	E 33
GROUP: NUMBER OF ANIMALS:		0.0mbk 4	0 . 1mbk 4	2.0mbk 4	6.0mbk 4	0.0mbk−R 4	0.1mbk-R 4	2.0mlok-R 4	6.0mbk-R 4
BRAIN (FORE)	# Ex	# SEV	# SEV	# SEV	# SEV	# SEV 0	# SEV 0	# SEV 0	# SEV 0
THORACIC CORD	# Ex	4	-4	4	4	0	0	0	0
BRAIN (MID)	# Ex	4	4	4	4	0	0	0	0
BRAIN (CEREBELLUM)	# Ex	4	4	4	4	0	0	0	0
PONS	# Ex	4	4	4	4	0	0	0	0
HEART	# Ex	4	4	4	4	0	0	0	0
AORTA	# Ex	3	4	4	4	0	0	0	0
TRACHEA Infiltrate, cellular	# Ex	4 0	1 0.25	1 0.25	4	0	0	0	0
ESOPHAGUS	# Ex	4	4	4	4	0	0	0	0
LUNG Alveolar proteinosis Infiltrate, macrophage Inflammation, acute Inflammation, chronic Inflammation, subacute Pigment, hemosiderin	∦ Ex	4 0 0 0 0 0 2 1.00	4 0 0 0 0 0 4 1.25	4 1.00 0 0 0 4 2.75	4 2.00 0 0 0 4 2.25	4 0 0 0 1 0.50 3 0.75	4 0 0 1 0.25 1 0.25 1 0.25	4 0 1 0.25 0 2 0.50 4 1.00	4 2 0.50 2 0.75 0 0 4 1.50 1 0.50
KIDNEY, RIGHT Cortex, infiltrate, cellul Nephrocalcinosis	# Ex .ar	4 0 3 0.75	4 1 0.25 3 0.75	4 0 4 1.00	4 0 4 1.00	0 0 0 03-Sep-1993	0 0 0	0 0 0	0 0 0

PROJECT ID. NO: TRL097 WEEKS: 14-27		F	FATES: T			ifice	•						5	T	P	NGE 34	•
GROUP:		0.0	Drmbk	0.1	mbk	2.0	lmbk	6.0	mbk	0.0mb	ok-R	0 . 1 mb	ok-R	2.0mb	±R	6.0mt	×-2
NUMBER OF ANIMALS:		4		4		4		4		4		4		4			4
			SEV		SEV		SEV		SEV		SEV		SEV		SEV		ŒV
Renal tubule, casts, pro	oteinic	1	0.25	0		0		0		0		0		0		0	
Tubular epith, vacuo, c	ytopl	1	0.25	0		0		0		0		0		0		0	
KIDNEY, LEFT	# Ex	4		4		4		4		0		0		0		0	
Cortex, hemorrhage		0		0		1	0.50	0		0		0		0		0	
Nephrocalcinosis		2	0.50	4	1.00	4	1.00	4	1.00	0		0		0		0	
Renal tubule, casts, pro	oteinic	1	0.25	0		1	0.25	2	0.50	0		0		0		0	
Tubular epith, vacuo, c	ytopl	1	0.25	0		0		0		0		0		0		0	
SPLEEN	# Ex	4		4		4		4		4		4		4		4	
Capsule, scar		0		0		0		0		1	0.50	0		0		0	
Extramedullary hematopo	iesis	0		0		1	0.25	3	1.25	0		0		0		0	
Pigment, hemosiderin		0		0		3	1.00	4	1.25	1	0.25	0		3	0.75	3	:.00
PANCREAS	# Ex	.4		4		4		4		0		0		0		0	
DUODENUM	# Ex	4		4		4		4		0		0		0		0	
LIVER	# Ex	4		4		4		4		4		4		4		4	
Hepatocyte, vacuo, cytor	plasm	0		0		0		0		0		1	0.50	0		1	2.50
Inflammation, subacute		0		0		1	0.50	4	1.75	0		0		0		0	
Kupffer cell, hyperplas	ia	0		1	0.25	1	0.25	0		0		0		0		0	
Kupffer cell, hypertropi	hy	0		0		1	0.50	4	2.00	0		0		0		0	
Pigment, hemosiderin		0		1	0.25	2	0.50	4	2.25	0		0		4	1.00	3	1.25
GALLBLADOER	# Ex	4		4		4		4		0		0		0		0	
ADRENAL GLAND	# Ex	4		4		4		4		0		0		0		0	
Contex, vacuolation, cy	toplasm	0		0		0		1	0.25	0		0		٥		0	
SALIVARY GLAND	# Ex	4		4		4		4		0		0		٥		0	
Infiltrate, cellular		2	0.50	1	0.25	1	0.25	1	0.25	0		0		C		0	

^{*} Severity calculated by the number of tissues examined.

							AF	SP PAG	Æ 35
PROJECT ID. NO: TRL097			Terminal Sacr	ifice			1 /8/ 17		
WEEKS: 14-27		SEX:	FEMALE				ם מם ם	Ц	
GROUP:		0.0mbk	0.1mbk	2.0mbk	6.0mbk	0.0mbk-R	0.1mbk-R	2.0mbk=R	6.0mb=R
NUMBER OF ANIMALS:		4	4	4	4	4	4	4	4
		# SEV	# SEV	# SEV	# SEV	# SEV	# SEV	SEV	# SEV
LYMPH NODE, SUBMANDIBULAR	# Ex	4	4	4	4	0	0	0	0
Hyperplasia		0	0	0	1 0.50	0	0	0	0
w.*									
JEJUNUM	# Ex	4	4	4	4	0	0	0	0
COLON	# Ex	4	4	4	4	0	0	0	0
COLON								•	
								_	-
TONSIL	# Ex	4	4	4	4	0	0	0	0
URETER	# Ex	4	4	4	4	0	0	0	0
ILEUM	# Ex	4	4	4	4	0	0	0	0
Inflammation, acute		0	1 0.50	0	0	0	0	0	0
LYMPH NODE, MESENTERIC	# Ex	4	4	4	4	0	0	0	0
TONGUE	# Ex	4	4	4	4	0	0	0	0
TORGE	#	•	•	•	-	Ü	· ·	· ·	o .
DIAPHRAGM	# Ex	4	4	4	4	0	0	0	0
THYMUS	# Ex	4	4	4	4	4	4	4	4
Depletion, lymphocyte		0	0	1 0.50	1 0.25	0	0	0	0
SKELETAL MUSCLE	# Ex	4	4	4	4	0	0	0	0
THYROID GLAND	# Ex	4	4	4	4	0	0	0	0
C-Cell, hyperplasia		0	1 0.25	0	0	0	0	0	0
Follicular cell, vacuo, c	ytopl	0	0	0	1 0.50	0	0	0	0
Infiltrate, cellular		0	0	1 0.25	0	0	0	0	0

PROJECT ID. NO: TRL097 MEEKS: 14-27		FATES: T SEX: F	erminal Sacr EMALE	ifice			AF	T PAG	E 36
GROUP: NUMBER OF ANIMALS:		0.0mbk 4	0.1mbk 4	2.0mbk 4	6.0mbk 4	0.0mbk-R 4	0.1mbk –R 4	2.0mbk⊸R 4	6 - Ombk –R 4
PARATHYROID GLAND	∦ Ex	§ SEV	# SEV	 SEV 4	₿ SEV	sev	∮ SEV 0	€ 9€V	9. 9.EV
PITUITARY GLAND Chromophobe, vacuo, cytopla	∦ Ex	4	4 0	4	3 1 0.33	0	0	0	0
CECUM .	# Ex	4	4	4	4	0	0	0	0
STOMACH	# Ex	4	4	4	4	o	0	0	0
URINARY BLADOER Infiltrate, cellular	# Ex	4	1 0.25	4	4	0	0	0	0
OVARIES	# Ex	4	4	4	4	0	0	0	0
UTERUS Hemorrhage	∦ Ex	4	4	1 0.25	4	0	0	0	0
MAMMARY GLAND	# Ex	2	4	2	4	0	0	0	0
SKIN	# Ex	4	4	4	4	0	0	0	0
SCIATIC NERVE	# Ex	4	4	4	4	0	0	0	0
EYE	# Ex	4	4	4	4	0	0	0	0
OPTIC MERVE	∦ Ex	4	4	4	4	o	0	0	0
RIB	# Ex	4	4	4	4	0	0	0	0

Severity Summary Table

PROJECT ID. NO: TRL097 WEEKS: 14-27			Terminal Sac			R A G		AGE 37	
GROUP: NUMBER OF ANIMALS:		0.0mbk 4	0.1mbk 4	2. Dmbk	6.0mbk 4	0.0mbk−R 4	0.1mbk-R 4	2 - 0mbk −R 4	6.0mbk−R 4
BONE MARROW	# Ex		# SEV	SEV	# SEV	# SEV	# SEV	# SEV	# SEV
Hypercellular		0	0	4 1.00	4 1.00	0	0	0	0
COSTOCHONDRAL JUNCTION	# Ex	4	4	4	4	0	0	0	0

^{*} Severity calculated by the number of tissues examined.

20-Aug-1993

Third Draft Pathology Report Toxicology Research Laboratory Study Number 097

DRAFT

SECTION IV
TABULATED ANIMAL DATA

Tabulated Animal Data

PROJECT ID: TRL097 WEEKS: 14-27		ROUP: 0.		SEX: MALE Sacrifice	R	3	T	PAGE	39
ANIMAL ID:	7505	7520	7521	7533					
BRAIN (FORE)	N	N	N	N					
THORACIC CORD	N	N	N	N					
BRAIN (MID)	N	N	N	N					
BRAIN (CEREBELLUM)	N	N	N	N					
PONS	N	N	N	N					
HEART	N	N	N	N					
AORTA	N	N	N	N					
TRACHEA	N	N	N	N					
ESOPHAGUS .	N	N	N	Ň					
LUNG Inflammation, subscute	N 	N -	1	N -					
KIDNEY, RIGHT Nephrocalcinosis	1	1	1	1					

Tabulated Animal Data

	PROJECT ID: TRL097 WEEKS: 14-27		ROUP: 0.		SEX: MALE Sacrifice		ß	T	PAGE 40	
ANIMAL II):	7505	7520	7521	7533					
KIDNEY, LEFT Nephrocalcinosis		1	1	1	N -					
SPLEEN		N	N	N	N					
PANCREAS		N	N	N	N					
DUODENUM		N	N	N	N					
LIVER		N	N	N	N					
GALLBLADDER		N	N	N	N					
ADRENAL GLAND		N	N	N	N	,				
SALIVARY GLAND		N	N	N	N					
LYMPH NODE, SUBMANO	DIBULAR	N	N	N	N					
JEJUNUM		N	N	N	N					
COLON		N	· N	N	N					

20-Aug-1993

Tabulated Animal Data

PROJECT ID: TRL097 MEEKS: 14-27		GROUP: 0 FATES: To		SEX: MALE Sacrifice	S	ß	T	PAGE	41
ANIMAL ID:	7505	7520	7521	7533					
TONSIL	N	N	N	N					
URETER	N	N	N	N					
ILEUM	N	N	N	N					
LYMPH NODE, MESENTERIC	N	N	N	N					
TONGUE	N	N	N	N					
DIAPHRAGM	N	N	Ň	N					
THYMUS	N	N _.	N	. N					
SKELETAL MUSCLE Inflammation, subacute	N -	N -	1	N -					
THYROID GLAND	N	N	U	N					
PARATHYROID GLAND	N	N	υ	N					
PITUITARY GLAND Craniopharyngeal duct, cyst	N -	Р	N 	N -					

Tabulated Animal Data

PROJECT ID: TRL097 WEEKS: 14-27		DUP: 0. TES: Te		SEX: MALE Sacrifice	R	A	ß	T	PAGE	42
ANIMAL ID:	7505	7520	7521	7533						
CECUM	N	N	N	N						
STOMACH	N	N	N	N						
URINARY BLADDER	N	N	N	N						
TESTIS	N	N	N	N						
EPIDIDYMIS	N	N	N	N						
PROSTATE	N	N	N	N						
MAMMARY GLAND	N	N.	N	U						
SKIN Follicle, inflammation	N -	1	N -	N -						
SCIATIC NERVE	N	N	N	N						
EYE	N	N	N	N						
OPTIC NERVE	N	N	N	N						

Tabulated Animal Data

PROJECT WEEKS:		2: 0.0mbk G: Terminal	SEX: MALE Sacrifice			PAGE 43
ANIMAL ID:	7505 75	20 7521	7533			-
RIB	N N	I N	N		•	
BONE MARROW	N N	i N	N			
COSTOCHONDRAL JUNCTION	N N	I N	N			

20-Aug-1993

Tabulated Animal Data

PROJECT ID: TRL097

WEEKS: 14-27

GROUP: 0.0mbk

FATES: Terminal Sacrifice

SEX: MALE

PAGE 44

ANIMAL ID:

7505 7520 7521 7533

OTHER TISSUES AND LESIONS:

LN, MEDIASTINAL - Hyperplasia

	PROJECT ID: TRL097 WEEKS: 14-27		GROUP: 0. FATES: Te		SEX: MALE Sacrifice		3	PAGE 45
ANIMAL I	o:	7503	7517	7523	7528			
BRAIN (FORE)		N	N	Ň	N			
THORACIC CORD		N	N	N	N			
BRAIN (MID)		N	N	N	N			
BRAIN (CEREBELLUM)		N	N	N	N			
PONS		N	N	N	N			
HEART		N	N	N	N			
ADRTA		N	N	N	N			
TRACHEA		N	N	N	N			
ESOPHAGUS		N	N	N	N			
LUNG Inflammation, su	bacute	N -	1	N	1			
KIDNEY, RIGHT Nephrocalcinosis		1	N -	1	1			

Tabulated Animal Data

LYMPH NODE, SUBMANDIBULAR

PROJECT ID: TRL097 WEEKS: 14-27		ROUP: 0		SEX: MALE Sacrifice		B	T	PAGE	46	
ANIMAL ID:	7503	7517	7523	752B						-
KIDNEY, LEFT		N		N						
Nephrocatcinosis	1	-	1	-						
Nephropathy	1	-	-	-						
SPLEEN			N	N						
Pigment, hemosiderin	1	-	-	-						
Siderofibrotic plaque		1	-	-						
PANCREAS	N	N	N	N						
DUODENUM	N	N	N	N						
LIVER			N	N						
Inflammation, subscute	-	1	-	-						
Nodular hyperplasia	1	-	-	~						*
GALLBLADDER		N	N	N						
Infiltrate, cellular	2	-	-	-						
ADRENAL GLAND	N	N	N	N						
SALIVARY GLAND	N	N	N	N						

PROJECT ID: TRL097 WEEKS: 14-27		ROUP: 0. ATES: Te		SEX: MALE Sacrifice		ß	Ţ	PAGE 4	7
ANIMAL ID:	7503	7517	7523	7528					
JEJUNUM _	N	N	N	N					
COLON	N	N	N	N					
TONSIL	N	N	N	N					
URETER	N	N	N	N					
ILEUM	N	N	N	N					
LYMPH NODE, MESENTERIC	N	N	N	N					
TONGUE Granuloma, foreign body	N -	N -	N -	2					
DIAPHRAGM	N	N	N	N					
THYMUS	N	N	N	N					
SKELETAL MUSCLE	N	N	N	N					
THYROID GLAND Infiltrate, cellular	N -	₩. -	N -	3					

	PROJECT ID: TRL097 WEEKS: 14-27		UP: 0.1 ES: Ter		SEX: MALE Sacrifice		A	ß	T	PAGE 48
ANIMAL ID:	7	503	7517	7523	7528					
PARATHYROID GLAND		N	N	N	N					
PITUITARY GLAND		N	N	N	N					
CECUM		N	N	N	N					
STOMACH		N	N	N	N					
URINARY BLADDER		N	N	N	N					
TESTIS		N	N	N	N					
EPIDIDYMIS		N	N	N ,	N					
PROSTATE		N	N	N	N					
MAMMARY GLAND		N	N	N	N					
SKIN		N	N	N	N					
SCIATIC NERVE		N.	N	N	N					
EYE		N	N	N	N					

Tabulated Animal Data

		PROJECT ID: TRL097 WEEKS: 14-27		OUP: 0. TES: Te		SEX: MALE Sacrifice		ß	T	PAGE 49	
22	ANIMAL II	D:	7503	7517	7523	7528					
	OPTIC NERVE		N	N	N	N					
	RIB		N	N	N	N					
	BONE MARROW		N	N	1	N -					
	Hypercellular		=	_	•	_					
	COSTOCHONDRAL JUNC	TION	N	N	N	N					

	PROJECT ID: TRL097 MEEKS: 14-27		ROUP: 2. ATES: Te		SEX: MALE Sacrifice		A	3	T	PAGE	50
ANIMAL ID	:	7502	7506	7514	7576						
BRAIN (FORE)		N	N	N	N						-
THORACIC CORD		N	N	N	N						
BRAIN (MID)		N	N	N	N						
BRAIN (CEREBELLUM)		'n	Ň	N	N						
PONS		N	N	N	N						
HEART		N	N	N	N						
		N	N	N	N						
AORTA											
TRACHEA		N	N	N	N	•					
ESOPHAGUS		N	N	N	N						
LUNG											
Alveolar proteino	sis	1	-	1	~						
Inflammation, sub		3	3	3	1						
KIDNEY, RIGHT											
Nephrocalcinosis		1	1	1	1						
Renal tubule, cas	ts, proteinic	-	1	-	-						

Tabulated Animal Data

LYMPH NODE, SUBMANDIBULAR

PAGE 51 SEX: MALE PROJECT ID: TRL097 GROUP: 2.0mbk WEEKS: 14-27 FATES: Terminal Sacrifice ANIMAL ID: 7502 7506 7514 7576 KIDNEY, LEFT Nephrocatcinosis 1 1 Renal tubule, casts, proteinic SPLEEN Extramedullary hematopoiesis Pigment, hemosiderin PANCREAS DUODENUM Inflammation, subacute Kupffer cell, hyperplasia Kupffer cell, hypertrophy Pigment, hemosiderin GALLBLADDER ADRENAL GLAND SALIVARY GLAND

	PROJECT ID: TRL097 WEEKS: 14-27				SEX: MALE Sacrifice		A	ß	T	PAGE 52
ANIMAL ID	:	7502	7506	7514	7576					
JEJUNUM		N	N	N	N _					
COLON		N	N	N	N					
TONSIL		N	N	N	N					
URETER		N	N	N	N					
ILEUM		N	N	N	N					
LYMPH NODE, MESENTE	RIC	N	N	N	N					
TONGLE		N	N	N	N.					
DIAPHRAGM	*	N	N	N	N					
THYMUS		N	N	N	N					
SKELETAL MUSCLE		N	N	N	N					
THYROID GLAND		N	N	N	N					
PARATHYROID GLAND		N	N	N	N					

	PROJECT ID: TRL097 WEEKS: 14-27		GROUP: 2. FATES: Te		SEX: MALE Sacrifice		ß	T	PAGE 53	
 ANIMAL ID	:	7502	7506	7514	7576					
PITUITARY GLAND		_N	N	N	N					
ŒŒM		N	N	Ň	N					
STOMACH		N	N	N	N					
URINARY BLADDER		U	N	N	N					
TESTIS Germinal epith, d	legeneration	N	N -	N -	2					
EPIDIDYMIS		N	N	N						
Hypospermia		-	-	-	3					
PROSTATE		U	N	N	N					
MAHMARY GLAND	*	N	N	N	N					
SKIN		N	N	N	N					
SCIATIC NERVE		N	N	N	N					
EYE		N	N	N	N					

Tabulated Animal Data

	PROJECT ID: TRL097 WEEKS: 14-27		OUP: 2.		SEX: MALE Sacrifice		A	ß	T	PAGE	54
ANIMAL IC);	7502	7506	7514	7576						
OPTIC NERVE -		N	N	N	N						
RIB		N	N	N	N						
BONE MARROW Hypercellular		N -	N -	1	N 		em **				
COSTOCHONDRAL JUNCT	TION	N	N	N	N						

03-Sep-1993

Tabulated Animal Data

PROJECT ID: TRL097

WEEKS: 14-27

GROUP: 2.0mbk

SEX: MALE FATES: Terminal Sacrifice

DRAFT

PAGE 55

ANIMAL ID:

7502 7506 7514 7576

OTHER TISSUES AND LESIONS:

LN, MEDIASTINAL - Hyperplasia

	PROJECT ID: TRL097 WEEKS: 14-27		OUP: 6		SEX: MALE Sacrifice		F	T	PAGE	56
ANIMAL	D:	7508	7509	7518	7524					
BRAIN (FORE)		N	N	N	N					
THORACIC CORD		N	N	N	N					
BRAIN (MID)		N	N	N	N					
BRAIN (CEREBELLUM)		N	N	N	N					
PONS		N	N	N	N					
HEART		N	N	N	N					
AORTA		N _.	N	. N	N					
TRACHEA		N	N	N	N					
ESOPHAGUS		N	N	N	N					
LUNG										
Alveolar protein	nosis	2	3	2	3					
Inflammation, su	bacute	3	3	3	4					
KIDNEY, RIGHT		N	N							
Nephrocalcinosis		-	-	1	1					

PROJECT ID: TRL097 WEEKS: 14-27		ROUP: 6 ATES: Te		SEX: MALE Sacrifice		ß	T	PAGE 57
ANIMAL ID:	7508	7509	7518	7524				
KIDNEY, LEFT	N		N					
Nephrocalcinosis	-	1	-	1				
Renal tubule, casts, proteinic	~	2	-	-				
SPLEEN		N						
Extramedullary hematopoiesis	_	-	1	1				
Pigment, hemosiderin	1	-	2	1				
PANCREAS	N	N	N	N				
DUODENUM	N	N	N	N				
LIVER								
Hepatocyte, necrosis	1	-	1.	-				
Inflammation, subacute	-	3	_	-				
Kupffer cell, hyperplasia	1	-	_	1				
Kupffer cell, hypertrophy	-	3	1	-				
Pigment, hemosiderin	-	3	-	i=.				
GALLBLADDER	N	N	N	N				
ADRENAL GLAND	N	N	N	N				
SALIVARY GLAND	N	N	N	N				
LYMPH NODE, SUBMANDIBULAR	N	N	N	N				

PROJECT WEEKS:	ID: TRL097 14-27			SEX: HA	UE []		ß	T	PAGE 58
ANIMAL ID:	7508	3 7509	7518	7524					
JEJUNUM	N	N	N	N .			*		
COLON	N	N	N	N					
TONSIL	N	N	N	N					
URETER	N	N	H	N					
ILEUM	N	N	N	N					
LYMPH NODE, MESENTERIC	N	N	N	N					
TONGUE	N	N	N	N					
DIAPHRAGM	N	N	N	N					
THYMUS Depletion, lymphocyte	2	3	N -	2					
SKELETAL MUSCLE	N	N	N	N					
THYROID GLAND	N	N	N	N					

Tabulated Animal Data

GROUP: 6.0mbk PROJECT ID: TRL097 SEX: MALE WEEKS: 14-27 FATES: Terminal Sacrifice ANIMAL ID: 7508 7509 7518 7524 PARATHYROID GLAND PITUITARY GLAND Craniopharyngeal duct, cyst CECUM STOMACH URINARY SLADDER Germinal epith, degeneration EPIDIDYMIS PROSTATE Atrophy HAMMARY GLAND U SKIN SCIATIC NERVE

Tabulated Animal Data

	PROJECT ID: TRL097 WEEKS: 14-27		ROUP: 6.		SEX: MALE Sacrifice		F	T	PAGE	60
ANIMAL IC	o:	7508	7509	7518	7524					
EYE		N	N	N	м					
OPTIC NERVE		N	N	N	N					
RIB		N	N	N	N					
BONE MARROW Hypercellular		1	1	1	1					
COSTOCHONDRAL JUNCT	TION	N	N	N	N					

Tabulated Animal Data

PROJECT ID: TRL097 WEEKS: 14-27

SEX: MALE GROUP: 0.0mbk-R FATES: Terminal Sacrifice

DBAFT *** 61

ANIMAL ID:	7512	7515	7531	7532	
LUNG	_ N	N			
Infiltrate, macrophage	_	-	1	-	
Inflammation, subacute	-	-	1	1	
SPLEEN			N	N	
Pigment, hemosiderin	2	1	-	-	
LIVER	N	N	N	N	
THYMUS	N	N	N	N	
BONE MARROW	N	N	N	N	

Tabulated Animal Data

PROJECT ID: 1			.1mbk-R erminal	SEX: MALE Sacrifice	DRAF	T	PAGE 62
ANIMAL ID:	7519	7527	7529	7536			
LUNG	N -	N -	1	ī			
SPLEEN Pigment, hemosiderin	N -	N	1	N ~	See 11		
LIVER	N	N	N	N			
THYMUS	N	N	N	N			
BONE MARROW	N	N	N	N			

Tabulated Animal Data

PROJECT ID: TRL097 GROUP: 2.0mbk-R SEX: MALE WEEKS: 14-27 FATES: Terminal Sacrifice ANIMAL ID: 7510 7516 7522 7538 LUNG Infiltrate, macrophage 1 2 Inflammation, chronic Inflammation, subacute Pigment, hemosiderin SPLEEN Pigment, hemosiderin LIVER Pigment, hemosiderin 1 THYMUS

BONE MARROW

20-Aug-1993

PAGE 63

Tabulated Animal Data

PROJECT ID: TRL097 WEEKS: 14-27 GROUP: 6.0mbk-R SEX: MALE FATES: Terminal Sacrifice

PAGE 64

ANIMAL ID:	7507	7511	7530	7535	
LUNG					
Infiltrate, macrophage	-	-	1	1	
Inflammation, chronic	1	1	2	-	
Inflammation, subscute	1	2	1	1	
	-				
SPLEEN			N	N	
Pigment, hemosiderin	1	1	-	-	
LIVER		N		N	
Pigment, hemosiderin	1	-	2	-	
THYMUS	N	N	н	N	
DOWN MARROW	N	N	N	N	
BONE MARROW	N	-	N	ri	

PROJECT ID: WEEKS: 14-2		JP: 0.0mbk ES: Terminal	SEX: FEMALE L Sacrifice	A B	PAGE 65
ANIMAL ID:	7542 7	7555 7558	7573		
BRAIN (FORE)	N	N N	N		ě
THORACIC CORD	N	N N	N		
BRAIN (MID)	N	N N	N		
BRAIN (CEREBELLUM)	N	н н	N		
PONS	N	N N	N		
HEART	N	и и	N		
AORTA	U	N N	N		
TRACHEA	N	N N	N	-	
ESOPHAGUS	N	и и	N		
LUNG Inflammation, subacute	1	N N	3		
arr sames only accounts			-		
KIDNEY, RIGHT					
Nephrocalcinosis	-	1 1	1		
Renal tubule, casts, proteini			-		
Tubular epith, vacuo, cytopl	-	- 1	-		

Tabulated Animal Data

JEJUNUM

	PROJECT ID: TRL097 WEEKS: 14-27		ROUP: 0.		SEX: FEMALE Sacrifice		A	5	T	PAGE	66
ANIMAL ID	: :	7542	7555	7558	7573						
KIDNEY, LEFT		N						-			
Nephrocalcinosis		_	1	1	_						
Renal tubule, cas	its, proteinic	-	-	-	1						
Tubular epith, va	cuo, cytopl	-	-	1	-						
SPLEEN		N	N	N	N						
PANCREAS		N	N	N	N						
DUODENUM		N	N	N	N						
LIVER		N	N	N	N						
GALLBLADOER		N	N	N	N						
ADRENAL GLAND		N	N	N	N						
SALIVARY GLAND Infiltrate, cellu	itar	1	N -	1	N -						
LYMPH NODE, SUBMAND	DIBULAR	N	N	N	N						

Tabulated Animal Data

	PROJECT ID: TRL097 WEEKS: 14-27				SEX:	FEMALE	R	ß	T	PAGE 67	
ANIMAL ID	:	7542	7555	7558	7573						
COLON		N.	N	N	N	-					
TONSIL		N	N	N	N						
URETER		N	N	N	N						
ILEUM		N	N	N	N						
LYMPH NODE, MESENTE	RIC	N	N	N	N						
TONGUE		N	N	N	N						
DIAPHRAGM		N	N	N	N						
THYMUS		N	N	N	N						
SKELETAL MUSCLE		N	N	N	N						
THYROID GLAND		N	N	N	Ň						
PARATHYROID GLAND		N	N	N	N						

	PROJECT ID: TRL097 WEEKS: 14-27		ROUP: 0.		SEX: FEMALE Sacrifice	R	F	T	PAGE	68	
ANIMAL IC):	7542	7555	7558	7573						
PITUITARY GLAND Craniopharyngeal	duct, cyst	N -	N	Р	P						
CECUM		N	N	N	N						
STOMACH		N	N	N	N						
URINARY BLADDER		N	N	N	N						
OVARIES		N	N	N	N						
UTERUS		N	N	N	N						
MAMMARY GLAND		N	U	N	υ						
SKIN		N	N	N	N						
SCIATIC NERVE		N	N	N	N						
EYE		N	N	N	N						
OPTIC NERVE		N	N	N	N						

Tabulated Animal Data

	PROJECT ID: TRL097 WEEKS: 14-27		OUP: 0.		SEX: FEMALE Sacrifice		N F	T	PAGE	69
ANIMAL IC):	7542	7555	7558	7573					
RIB	-	N	N	N	N					
BONE MARROW		N	N	N	N					
COSTOCHONDRAL JUNCT	TION	N	N	N	N					

	PROJECT ID: TRL097 ÆEKS: 14-27		:OUP: 0.		SEX: FEMA Sacrifice	NLE		F	T	PAGE	70
ANIMAL ID:		7550	7560	7567	7569						
BRAIN (FORE)		N	N	N	N						
THORACIC CORD		N	N	N	N						
BRAIN (MID)		N	N	N	N						
BRAIN (CEREBELLUM)		N	N	N	N						
PONS		N	N	N	N						
HEART		N	N	N	N						
AORTA		N	N	N	N		,				
TRACHEA Infiltrate, cellula	nr.	N -	N -	1	N						
ESOPHAGUS		N	N	N	N						
LUNG Inflammation, subac	aute	1	2	1	1						

	PROJECT ID: TRL097 WEEKS: 14~27		ROUP: 0.		SEX: FE Sacrifice	MIE		ß	T	PAGE	71
ANIMAL IS):	7550	7560	7567	7569						
KIDNEY, RIGHT		N									
Cortex, infiltrat	te, cellular	-	1	-	-						
Nephrocalcinosis		-	1	1	1						
KIDNEY, LEFT											
Nephrocatcinosis		1	1	1	1						
SPLEEN		N	N	N	N						
PANCREAS		N	N	N	N						
DUODENUM		N	N	N	N						
LIVER			N,	. N	, N						
Kupffer cell, hyp	perplasia	1	-	-	_						
Pigment, hemoside	erin	1	-	-	-						
GALLBLADDER		N	N	N	N						
ADRENAL GLAND		N	N	Ň	N						
SALIVARY GLAND		N	N		N						
Infiltrate, cellu	ular	-	-	1	-						
LYMPH NODE, SUBMAND	DIBULAR	N	N	N.	N						

	PROJECT ID: TRL097 MEEKS: 14-27			0.1mbk Terminal	SEX: FEMALE Sacrifice		F	PAGE	72
ANIMAL II	o:	755	0 756	0 7567	7569				
JEJUNUM		N	N	N	N				
COLON		N	N	N	N				
TONSIL		N	N	N	N				
URETER		N	N	N	N				
ILEUM Inflammation, acu	ute	2	N -	N -	N -				
LYMPH NODE, MESENTE	ERIC	N	N	N	N				
TONGUE	* * *	N	N	N	N				
DIAPHRAGM		N	N	N	N		-2		
THYMUS		N	N	N	N				
SKELETAL MUSCLE		N	N	N	N				
THYROID GLAND C-Cell, hyperplas	sia	1	N -	N -	N -				

	PROJECT ID: TRL097 WEEKS: 14-27				SEX: FE Sacrifice	MALE		F	T	PAGE	73	
ANIMAL ID):	7550	7560	7567	7569							
PARATHYROID GLAND		N	N	N	N				-			
PITUITARY GLAND Craniopharyngeal	duct, cyst	N -	Р	N -	Р							
CECUM		N	N	N	N							
STOMACH		N	N	N	N							
URINARY BLADDER Infiltrate, cellu	ular	N -	1	N -	N -							
OVARIES		N	N	N	N							
UTERUS		N	N	N	N							
MAMMARY GLAND		N	N	N	N							
SKIN		N	N	N	N							
SCIATIC NERVE		N.	N	N	N							
EYE		N	N	N	N							

Tabulated Animal Data

	JECT ID: TRL097 (S: 14-27		JP: 0.1 ES: Ter		SEX: FEMALE			ß	T	PAGE	74
ANIMAL ID:	75	50 7	7560	7567	7569						
OPTIC NERVE	N	1	N -	N	N	-					
RIB	N	i	N	N	N						
BONE HARROW	N	l	N	N	N						
COSTOCHONDRAL JUNCTION	N	ı	N	N	N						

	PROJECT ID: TRL097 WEEKS: 14-27		GROUP: 2. FATES: Te		SEX: FEMALE Sacrifice	R	ß	T	PAGE	75
ANIMAL ID	:	7556	7564	7572	7574					
BRAIN (FORE)		N	N	**	N					
THORACIC CORD		N	N	N	N					
BRAIN (MID)		N	N	N	N					
BRAIN (CEREBELLUM)		N	N	N	N					
PONS		N	N	N	N					
HEART		N	N	N	N					
AORTA		N	N	N	N					
TRACHEA		N	N	N						
Infiltrate, cellu	lar	-	-	-	1					
ESOPHAGUS		N	N	N	N					
LUNG										
Alveolar proteino		1	1	1	1					
Inflammation, sub	acute	3	2	3	3					
KIDNEY, RIGHT										
Nephrocalcinosis		1	1	1	1					

Tabulated Animal Data

PROJECT ID: WEEKS: 14-27		ROUP: 2		SEX: FEMALE Sacrifice		ß	T	PAGE	76
ANIMAL ID:	7556	7564	7572	7574					
KIDNEY, LEFT	-								
Contex, hemorrhage	-	_	2	-					
Nephrocalcinosis	1	1	1	1					
Renal tubule, casts, proteinic	1	-	-	-					
SPLEEN			N		*				
Extramedullary hematopoiesis	-	_	_	1					
Pigment, hemosiderin	2	1	-	1					
PANCREAS	N	N	N	N					
DUCCENUM	N	N	N	N					
LIVER		N	N						
Inflammation, subacute	2	_	-	=					
Kupffer cell, hyperplasia	-	-	-	1					
Kupffer cell, hypertrophy	2	-	-	_					
Pigment, hemosiderin	1	-	-	1					
GALLBLADDER	N	N	N	N					
ADRENAL GLAND	N		N	N					
Cortex, cyst	-	P	-	-					

SALIVARY GLAND

Infiltrate, cellular

PROJECT ID: TRL097 WEEKS: 14-27		ROUP: 2 ATES: To		SEX: FEMALE Sacrifice		3	T PAGE	77
ANIMAL ID:	7556	7564	7572	7574				
LYMPH NODE, SUBMANDIBULAR	N	N	N	N				
JEJUNUM	N	N	N	N				
COLON	N	N	N	N				
TONSIL	N	N	N	N				
URETER	N	N	N	N .				
ILEUM	N	N	N	N				
LYMPH NODE, MESENTERIC	N	Ň	N	N				
TONGUE	N	N	N	N				
DIAPHRAGM	N	N	N	N				
THYMUS Depletion, lymphocyte	2	N -	N -	N -				
SKELETAL MUSCLE	N	N	N	N				

	PROJECT ID: TRL097 WEEKS: 14-27		GROUP: 2 FATES: To		SEX: FE Sacrifice	MALE		ß	T	PAGE	78
ANIMAL ID	:	7556	7564	7572	7574						
THYROID GLAND Infiltrate, cellu	lar	N -	N -	N -	1						
PARATHYROID GLAND		N	N	N	N						
PITUITARY GLAND		N	N	N	N						
ŒŒ		N	N	N·	N						
STOMACH		N	N	N	N						
URINARY BLADDER		N	N	N	N						
OVARIES		N	N	N	N						
UTERUS Hemorrhage		N -	N -	1	N -						
MAMMARY GLAND		N	U	U	N						
SKIN		N	N	N	N						
SCIATIC NERVE		N	N	N	N						

Tabulated Animal Data

PROJECT ID: TRL097 WEEKS: 14-27		ROUP: 2. ATES: Te		SEX: FEMALE Sacrifice		ß	I	PAGE	79
ANIMAL ID:	7556	7564	7572	7574					
EYE	N	N	N	N					
OPTIC NERVE	N	N	N	N					
RIB	N	N	N	N					
BONE MARROW Hypercellular	1	1	1	1					
COSTOCHONDRAL JUNCTION	N	N	N	N					

Tabulated Animal Data

	PROJECT ID: TRL097 WEEKS: 14-27		ROUP: 6.		SEX: FEMALE Sacrifice		ß	T	PAGE	80
ANIMAL IC):	7544	7546	7551	7568					
BRAIN (FORE)		N	N	N	N					-
THORACIC CORD		N	N	N	N					
BRAIN (MID)		N	N	N	N					
BRAIN (CEREBELLUM)		N	N	N	N					
PONS		N	N	N	N					
HEART		N	N	N	N					
AORTA	*	N	N	N	N					
TRACHEA		N	N	N	N	-				
ESOPHAGUS		N	N	N	N					
LUNG										
Alveolar proteino	sis	2	3	1	2					
Inflammation, sub		2	3	2	2					
KIDNEY, RIGHT										
Nephrocalcinosis		1	1	1	1					

Tabulated Animal Data

Infiltrate, cellular

PROJECT ID: TRL09 WEEKS: 14-27		ROUP: 6 ATES: To		SEX: FEMALE Sacrifice		5	T PAGE	81
ANIMAL ID:	7544	7546	7551	7568				
KIDNEY, LEFT					_			
Nephrocatcinosis	1	1	1	1				
Renal tubule, casts, proteinic	1	-	-	1				
SPLEEN								
Extramedullary hematopoiesis	-	1	2	2				
Pigment, hemosiderin	1	2	1	1				
PANCREAS	N	N	N	N				
DUODENUM	N	N	N	N				
LIVER								
Inflammation, subacute	2	2	2	1				
Kupffer cell, hypertrophy	3	2	1	2				
Pigment, hemosiderin	2	2	3	2				
GALLBLADDER	N	N	N	N				
ADRENAL GLAND	Ň	N		N				
Cortex, vacuolation, cytoplasm	-	-	1	-				
SALIVARY GLAND	N	N	N					

Tabulated Animal Data

PROJECT ID: TRL097 WEEKS: 14-27		ROUP: 6.		SEX: FEMALE Secrifice		ß	T	PAGE	82
ANIMAL ID:	7544	7546	7551	7568					
LYMPH NODE, SUBMANDIBULAR Hyperplasia	2	N -	H -	M 					
JEJUNUM	N	N	N	N					
COLON	N	N	N	N					
TONSIL	N	N	N	N					
URETER	N	N	N	N					
ILEUM	N	N	N	N					
LYMPH NODE, MESENTERIC	N	N	N	N					
TONGUE	N	N	N	N					
DIAPHRAGM	N	N	N	N					
THYMUS Depletion, lymphocyte	N -	1	N -	N -					
SKELETAL MUSCLE	N	N	N	N					

Tabulated Animal Data

	PROJECT ID: TRL097 WEEKS: 14-27		ROUP: 6.		SEX: FEMALE Sacrifice		3	I	PAGE	83
 ANIMAL ID	:	7544	7546	7551	7568					
THYROID GLAND Follicular cell,	vacuo, cytopl	- N -	N -	2	N -					
PARATHYROID GLAND		N	N	N	N					
PITUITARY GLAND Chromophobe, vacu Craniopharyngeal		- Р	U - -	1	- Р					
CECUM		N	N	N	N					
STOMACH		N	N	N	N					
URINARY BLADDER		N	N	N	N					8 1
OVARIES		N	N	N	N					
UTERUS		N	N	N	N					
HAMMARY GLAND		N	N	N	N					
SKIN		N	N	N	N					
SCIATIC NERVE		N	N	N	N					

Tabulated Animal Data

	PROJECT ID: TRL097 WEEKS: 14-27		OUP: 6. TES: Te		SEX: FEMALE Sacrifice		A	3	T	PAGE	84
ANIMAL	ID:	7544	7546	7551	7568						
EYE	æ.	N	H	N	N						
OPTIC NERVE		N	N	N	N						
RIB		N	N	N	N		- 6				
BONE MARROW Hypercellular		1	1	1	ī						
COSTOCHONDRAL JUN	HCTION	N	N	N	N						

Tabulated Animal Data

PROJECT ID: TRL097 WEEKS: 14-27

GROUP: 0.0mbk-R SEX: FEMALE FATES: Terminal Sacrifice

DRAFT PAGE 85

ANIMAL ID:	7541	7549	7557	7566	
LUNG					
Inflammation, chronic	2	-	-	-	
Inflammation, subacute	•	1	1	1	
SPLEEN	N		N	N	
Capsule, scar	-	2	-	-	
Pigment, hemosiderin	-	1	-	-	
LIVER	N	N	N	N	
THYMUS	N	N	N	N	
BONE MARROW	N	N	N	N	

03-Sep-1993

Tabulated Animal Data

PROJECT ID: TRL097 WEEKS: 14-27

GROUP: 0.1mbk-R SEX: FEMALE

FATES: Terminal Sacrifice

ANIMAL ID:	7543	7545	7552	7553
LUNG		N		
Inflammation, acute	1	-		-
Inflammation, chronic	-	-	1	-
Inflammation, subacute	-	-	-	1
SPLEEN	N	N	N	N
LIVER Hepatocyte, vacuo, cytoplasm	N -	N -	2	N -
THYMUS	N	N	N	N
BONE MARROW	N	N	N	N

Tabulated Animal Data

PROJECT ID: TRL097 WEEKS: 14-27

GROUP: 2.0mbk-R

SEX: FEMALE FATES: Terminal Sacrifice

DRAFT

PAGE 87

ANIMAL ID:	7548	7561	7562	7571	
LUNG					
Infiltrate, macrophage	-	-	1	-	
Inflammation, chronic	1	-	1	-	
Inflammation, subacute	1	1	1	1	
SPLEEN		N			
Pigment, hemosiderin	1	-	1	t	
LIVER					
Pigment, hemosiderin	1	1	1	1	
THYMUS	N	N	N	N	
BONE MARROW	N	N	N	N	

Tabulated Animal Data

PRDJECT ID: TRL09 WEEKS: 14-27		ROUP: 6		SEX: FEMALE Sacrifice	R A	ß	7	AGE 88
ANIMAL ID:	7539	7540	7554	7563				
LUNG								
Alveolar proteinosis	1	-	1	-				~
Heteropic bone	-	P	-	-				
Infiltrate, macrophage	1	-	2	-				
Inflammation, subacute	2	1	2	1				
Pigment, hemosiderin	-	-	2	-				
SPLEEN	N							
Pigment, hemosiderin	-	1	1	2				
LIVER	N							
Hepatocyte, vacuo, cytoplasm	-	_	2	-				
Pigment, hemosiderin	-	2	1	2				
THYMUS	N	N	N	N				
BONE MARROW	N	N	N	N				

03-Sep-1993

Third Draft Pathology Report Toxicology Research Laboratory Study Number 097

DRAFT

SECTION V

CORRELATION OF GROSS AND MICROSCOPIC (MICRO) FINDINGS

Correlation of Gross & Micro Findings

D

PROJECT ID: TRL097

GROUP: 0.0mbk

SEX: MALE

PAGE 90

WEEKS: 14-27

FATES: Terminal Sacrifice

PATHOLOGY ID. NO: TI097-7505 PATHOLOGIST: MJT ANIMAL ID: 7505

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 14

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

PATHOLOGY ID. NO: TI097-7520 PATHOLOGIST: MJT ANIMAL ID: 7520

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 14

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

>LYMPH NODE, MEDIASTINAL - ENLARGED LN, MEDIASTINAL - Hyperplasia

ANIMAL ID: 7521 PATHOLOGY ID. NO: TI097-7521 PATHOLOGIST: MJT

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 14

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

PATHOLOGY ID. NO: TI097-7533 PATHOLOGIST: MJT 7533 ANIMAL ID:

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 14

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

Correlation of Gross & Micro Findings

PROJECT ID: TRL097

GROUP: 0.1mbk

SEX: MALE

PAGE 91

WEEKS: 14-27

FATES: Terminal Sacrifice

ANIMAL ID: 7503

PATHOLOGY ID. NO: TI097-7503 PATHOLOGIST: MJT

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 14

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

>LIVER, MEDIAN LOBE - NODULE, 1, LIVER- Nodular hyperplasia 25X27X5 MM

ANIMAL ID:

7517

PATHOLOGY ID. NO: TI097-7517 PATHOLOGIST: MJT

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 14

REFERENCE TO NECROPSY RECORD:

RELATED HISTOPATHOLOGY:

ANIMAL ID:

7523

ANIMAL FATE: Terminal Sacrifice

REFERENCE TO NECROPSY RECORD:

PATHOLOGY ID. NO: TI097-7523 PATHOLOGIST: MJT

WEEKS ON TEST:14

RELATED HISTOPATHOLOGY:

ANIMAL ID:

7528

PATHOLOGY ID. NO: TI097-7528 PATHOLOGIST: MJT

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 14

REFERENCE TO NECROPSY RECORD:

RELATED HISTOPATHOLOGY:

>SPLEEN - NODULE, 1, ROUND, RED, No corresponding lesion

2X2.5 MM

Correlation of Gross & Micro Findings

PROJECT ID: TRL097

GROUP: 2.0mbk

SEX: MALE

PAGE 92

WEEKS: 14-27

ANIMAL ID:

FATES: Terminal Sacrifice

7502 ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 14

REFERENCE TO NECROPSY RECORD:

RELATED HISTOPATHOLOGY:

PATHOLOGY ID. NO: TI097-7502 PATHOLOGIST: MJT

PATHOLOGY ID. NO: TI097-7506 PATHOLOGIST: MJT ANIMAL ID:

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 14

REFERENCE TO NECROPSY RECORD:

RELATED HISTOPATHOLOGY:

PATHOLOGY ID. NO: TI097-7514 PATHOLOGIST: MJT ANIMAL ID: 7514

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 14

REFERENCE TO NECROPSY RECORD:

RELATED HISTOPATHOLOGY:

>LYMPH NODE, MEDIASTINAL - ENLARGED LN, MEDIASTINAL - Hyperplasia

>TESTIS, UNILATERAL - SMALL

No corresponding lesion

Correlation of Gross & Micro Findings

PROJECT ID: TRL097

GROUP: 2.0mbk

SEX: MALE

PAGE 93

WEEKS: 14-27

ANIMAL ID:

FATES: Terminal Sacrifice

PATHOLOGY ID. NO: TI097-7576 PATHOLOGIST: MJT

7576 ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 14

REFERENCE TO NECROPSY RECORD:

RELATED HISTOPATHOLOGY:

>EPIDIDYMIS - SMALL, 3.5X2 MM

EPIDIDYMIS- Hypospermia

Correlation of Gross & Micro Findings

PROJECT ID: TRL097

GROUP: 6.0mbk

SEX: MALE

PAGE 94

WEEKS: 14-27

FATES: Terminal Sacrifice

ANIMAL ID: 7508

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 14

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

PATHOLOGY ID. NO: TI097-7508 PATHOLOGIST: MJT

ANIMAL ID: 7509

PATHOLOGY ID. NO: TI097-7509 PATHOLOGIST: MJT

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 14

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

ANIMAL ID: 7518

PATHOLOGY ID. NO: TI097-7518 PATHOLOGIST: MJT

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 14

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

ANIMAL ID: 7524

PATHOLOGY ID. NO: TI097-7524 PATHOLOGIST: MJT

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 14

REFERENCE TO NECROPSY RECORD:

RELATED HISTOPATHOLOGY:

Correlation of Gross & Micro Findings

PROJECT ID: TRL097 GROUP: 0.0mbk-R SEX: MALE

PAGE 95

WEEKS: 14-27

FATES: Terminal Sacrifice

PATHOLOGY ID. NO: TI097-7512 PATHOLOGIST: MJT

ANIMAL ID: 7512 ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 27

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

ANIMAL ID: 7515 PATHOLOGY ID. NO: TI097-7515 PATHOLOGIST: MJT

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 27

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

ANIMAL ID: 7531 PATHOLOGY ID. NO: TI097-7531 PATHOLOGIST: MJT

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 27

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

ANIMAL ID: 7532 PATHOLOGY ID. NO: TI097-7532 PATHOLOGIST: MJT

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 27

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

Correlation of Gross & Micro Findings

PROJECT ID: TRL097

GROUP: 0.1mbk-R SEX: MALE

PAGE 96

WEEKS: 14-27

FATES: Terminal Sacrifice

PATHOLOGY ID. NO: TI097-7519 PATHOLOGIST: MJT

ANIMAL ID: 7519 ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 27

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

ANIMAL ID: 7527

PATHOLOGY ID. NO: TI097-7527 PATHOLOGIST: MJT

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 27

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

ANIMAL ID: 7529

PATHOLOGY ID. NO: TI097-7529 PATHOLOGIST: MJT

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 27

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

ANIMAL ID: 7536 PATHOLOGY ID. NO: TI097-7536 PATHOLOGIST: MJT

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 27

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

Correlation of Gross & Micro Findings

PROJECT ID: TRL097

GROUP: 2.0mbk-R

SEX: MALE

PAGE 97

WEEKS: 14-27

FATES: Terminal Sacrifice

ANIMAL ID: 7510

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 27

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

PATHOLOGY ID. NO: TI097-7510 PATHOLOGIST: MJT

ANIMAL ID: 7516

PATHOLOGY ID. NO: TI097-7516 PATHOLOGIST: MJT

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 27

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

ANIMAL ID: 7522

PATHOLOGY ID. NO: TI097-7522 PATHOLOGIST: MJT

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 27

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

ANIMAL ID: 7538

PATHOLOGY ID. NO: TI097-7538 PATHOLOGIST: MJT

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 27

REFERENCE TO NECROPSY RECORD:

RELATED HISTOPATHOLOGY:

Correlation of Gross & Micro Findings

In

PROJECT ID: TRL097

GROUP: 6.0mbk-R SEX: MALE

PAGE 98

WEEKS: 14-27

FATES: Terminal Sacrifice

PATHOLOGY ID. NO: TI097-7507 PATHOLOGIST: MJT ANIMAL ID: 7507

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 27

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

PATHOLOGY ID. NO: TI097-7511 PATHOLOGIST: MJT ANIMAL ID: 7511

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 27

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

ANIMAL ID: 7530 PATHOLOGY ID. NO: TI097-7530 PATHOLOGIST: MJT

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 27

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

ANIMAL ID: 7535 PATHOLOGY ID. NO: TI097-7535 PATHOLOGIST: MJT

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 27

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

Correlation of Gross & Micro Findings

PROJECT ID: TRL097

GROUP: 0.0mbk

SEX: FEMALE

PAGE 99

WEEKS: 14-27

FATES: Terminal Sacrifice

ANIMAL ID: 7542

PATHOLOGY ID. NO: TI097-7542 PATHOLOGIST: MJT

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 14

REFERENCE TO NECROPSY RECORD:

RELATED HISTOPATHOLOGY:

ANIMAL ID: 7555

PATHOLOGY ID. NO: TI097-7555 PATHOLOGIST: MJT

WEEKS ON TEST: 14

ANIMAL FATE: Terminal Sacrifice

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

ANIMAL ID: 7558

PATHOLOGY ID. NO: TI097-7558 PATHOLOGIST: MJT

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 14

WEEKS ON TEST: 14

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

ANIMAL ID: 7573

PATHOLOGY ID. NO: TI097-7573 PATHOLOGIST: MJT

ANIMAL FATE: Terminal Sacrifice

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

Correlation of Gross & Micro Findings

In

PROJECT ID: TRL097

GROUP: 0.1mbk

SEX: FEMALE

PAGE 100

WEEKS: 14-27

FATES: Terminal Sacrifice

PATHOLOGY ID. NO: TI097-7550 PATHOLOGIST: MJT ANIMAL ID: 7550

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 14

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

ANIMAL ID: 7560 PATHOLOGY ID. NO: TI097-7560 PATHOLOGIST: MJT

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 14

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

ANIMAL ID: 7567 PATHOLOGY ID. NO: TI097-7567 PATHOLOGIST: MJT

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 14

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

ANIMAL ID: 7569 PATHOLOGY ID. NO: TI097-7569 PATHOLOGIST: MJT

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 14

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

Correlation of Gross & Micro Findings

PROJECT ID: TRL097

GROUP: 2.0mbk

SEX: FEMALE

PAGE 101

WEEKS: 14-27

FATES: Terminal Sacrifice

PATHOLOGY ID. NO: TI097-7556 PATHOLOGIST: MJT

ANIMAL ID: 7556 ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 14

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

ANIMAL ID: 7564 PATHOLOGY ID. NO: TI097-7564 PATHOLOGIST: MJT

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 14

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

ANIMAL ID: 7572 PATHOLOGY ID. NO: TI097-7572 PATHOLOGIST: MJT

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 14

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

ANIMAL ID: 7574 PATHOLOGY ID. NO: TI097-7574 PATHOLOGIST: MJT

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 14

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

Correlation of Gross & Micro Findings

Ini

PROJECT ID: TRL097

GROUP: 6.0mbk

SEX: FEMALE

PAGE 102

WEEKS: 14-27

FATES: Terminal Sacrifice

PATHOLOGY ID. NO: TI097-7544 PATHOLOGIST: MJT ANIMAL ID: 7544

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 14

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

ANIMAL ID: 7546 PATHOLOGY ID. NO: TI097-7546 PATHOLOGIST: MJT

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 14

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

ANIMAL ID: 7551 PATHOLOGY ID. NO: TI097-7551 PATHOLOGIST: MJT

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 14

REFERENCE TO NECROPSY RECORD:

RELATED HISTOPATHOLOGY:

ANIMAL ID: 7568 PATHOLOGY ID. NO: TI097-7568 PATHOLOGIST: MJT

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 14

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

Correlation of Gross & Micro Findings

PROJECT ID: TRL097

GROUP: 0.0mbk-R SEX: FEMALE

PAGE 103

WEEKS: 14-27

FATES: Terminal Sacrifice

PATHOLOGY ID. NO: TI097-7541 PATHOLOGIST: MJT

ANIMAL ID: 7541 ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 27

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

ANIMAL ID: 7549 PATHOLOGY ID. NO: TI097-7549 PATHOLOGIST: MJT

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 27

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

>SPLEEN, CAPSULE - SCAR, 2, WHITE SPLEEN- Capsule, scar

ANIMAL ID: 7557 PATHOLOGY ID. NO: TI097-7557 PATHOLOGIST: MJT

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 27

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

ANIMAL ID: 7566 PATHOLOGY ID. NO: TI097-7566 PATHOLOGIST: MJT

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 27

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

Correlation of Gross & Micro Findings

M

PROJECT ID: TRL097

GROUP: 0.1mbk-R SEX: FEMALE

PAGE 104

WEEKS: 14-27

FATES: Terminal Sacrifice

ANIMAL ID: 7543 PATHOLOGY ID. NO: TI097-7543 PATHOLOGIST: MJT

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 27

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

PATHOLOGY ID. NO: TI097-7545 PATHOLOGIST: MJT ANIMAL ID: 7545

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 27

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

ANIMAL ID: 7552 PATHOLOGY ID. NO: TI097-7552 PATHOLOGIST: MJT

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 27

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

ANIMAL ID: 7553 PATHOLOGY ID. NO: TI097-7553 PATHOLOGIST: MJT

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 27

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

Correlation of Gross & Micro Findings

PROJECT ID: TRL097 GROUP: 2.0mbk-R SEX: FEMALE

PAGE 105

WEEKS: 14-27

FATES: Terminal Sacrifice

ANIMAL ID: 7548

PATHOLOGY ID. NO: TI097-7548 PATHOLOGIST: MJT

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 27

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

ANIMAL ID: 7561

PATHOLOGY ID. NO: TI097-7561 PATHOLOGIST: MJT

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 27

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

ANIMAL ID: 7562

PATHOLOGY ID. NO: TI097-7562 PATHOLOGIST: MJT

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 27

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

ANIMAL ID: 7571

PATHOLOGY ID. NO: TI097-7571 PATHOLOGIST: MJT

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 27

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

Correlation of Gross & Micro Findings

PROJECT ID: TRL097

GROUP: 6.0mbk-R

SEX: FEMALE

PAGE 106

WEEKS: 14-27

FATES: Terminal Sacrifice

ANIMAL ID: PATHOLOGY ID. NO: TI097-7539 PATHOLOGIST: MJT 7539

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 27

REFERENCE TO NECROPSY RECORD:

RELATED HISTOPATHOLOGY:

PATHOLOGY ID. NO: TI097-7540 PATHOLOGIST: MJT ANIMAL ID: 7540

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 27

REFERENCE TO NECROPSY RECORD:

RELATED HISTOPATHOLOGY:

ANIMAL ID: 7554 PATHOLOGY ID. NO: TI097-7554 PATHOLOGIST: MJT

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 27

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

>LUNG - FOCUS, MULTIPLE, GREEN, 7X10 No corresponding lesion

MM

PATHOLOGY ID. NO: TI097-7563 PATHOLOGIST: MJT ANIMAL ID: 7563

ANIMAL FATE: Terminal Sacrifice

WEEKS ON TEST: 27

REFERENCE TO NECROPSY RECORD: RELATED HISTOPATHOLOGY:

Third Draft Pathology Report Toxicology Research Laboratory Study Number 097

DRAFT

SECTION VI QUALITY ASSURANCE STATEMENT

QUALITY ASSURANCE STATEMENT



This histopathology project was inspected and audited by the PAI Quality Assurance Unit (QAU) as required by the Good Laboratory Practice (GLP) regulations promulgated by the U.S. Food and Drug Administration. Results of these activities indicate that the portions of the study performed by PAI conformed with GLP regulations and applicable Standard Operating Procedures. The pathology narrative report is an accurate reflection of the recorded data. The following table is a record of the inspections/audits performed and reported by the QAU:

	Date of Inspection	Phase Inspected	Date Findings Reported to Management and Study Pathologist
*	04/22/93	Tissue Trimming	04/22/93
*	06/08/93	Processing/Embedding	06/08/93
*	04/12/93	Microtomy	04/12/93
*	07/14/93	Staining	07/19/93
*	07/14/93	Coverslipping	07/19/93
**	04/15/93	Labeling	04/15/93
*	06/09/93	Quality Control/Checkout	06/09/93
**	09/03/93	Individual Animal Data	09/03/93
**	09/03/93	Data Entry	09/03/93
**	09/03/93	Computer-Generated Tables	09/03/93
**	09/03/93	Draft Pathology Report	09/03/93
**	09/28/93	Second Draft Pathology Report	09/28/93
**	03/18/94	Third Draft Pathology Report	03/18/94

^{*}General quarterly phase inspection

In accordance with the PAI Quality Assurance Division's Standard Operating Procedures, all critical phase inspections are conducted on a random basis quarterly or more frequently. Those general phase inspections listed are the most recent conducted during the period each task associated with this project was performed.

Quality Assurance Unit PAI Illinois Division 03/18/94

Date

Thirteen Week Oral Toxicity Study of WR 238605 with a Thirteen Week Recovery Period in Dogs, TRL Study Number 097.

^{**}Inspection specific for Study Number

Third Draft Pathology Report Toxicology Research Laboratory Study Number 097

DRAFT

SECTION VII

APPENDIX I: BONE MARROW REPORT



Pathology Associates, Inc.

Suite I 15 Worman's Mill Court Frederick, MD 21701 (301) 663-1644 (301) 663-8994 FAX

BONE MARROW EVALUATION REPORT



THIRTEEN WEEK ORAL TOXICITY STUDY OF WR 238605 WITH A THIRTEEN WEEK RECOVERY PERIOD IN DOGS

STUDY NUMBER 097

PREPARED FOR
TOXICOLOGY RESEARCH LABORATORY
CHICAGO, ILLINOIS

TABLE OF CONTENTS



Bone Marrow Evaluation Narrative

M:E Ratio Group Summary Tables

II
Individual Animal M:E Ratio Data

III
Individual Animal Data Sheets

IV

Quality Assurance Statement

V

I. Bone Marrow Evaluation Narrative

DRAFT

BONE MARROW EVALUATION REPORT

THIRTEEN WEEK ORAL TOXICITY STUDY OF WR 238605 WITH A THIRTEEN WEEK RECOVERY PERIOD IN DOGS

INTRODUCTION

DRAFT

This report prepared by Pathology Associates, Inc. (PAI) for Toxicology Research Laboratory (TRL), University of Illinois at Chicago, Department of Pharmacology, P. O. Box 6998, Chicago, IL, 60680, presents the results of bone marrow evaluation from dogs given WR 238605 orally for at least thirteen weeks.

EXPERIMENTAL DESIGN AND METHODS

Thirty-two male and thirty-two female dogs were randomized into one of four groups as described below.

Treatment Group	Dose Level (mg base/kg/day)	Number of Males	Number of Females		
1	0	4 + 4*	4 + 4*		
2	0.1	4 + 4*	4 + 4*		
3	2.0	4 + 4*	4 + 4*		
4	6.0	4 + 4*	4 + 4*		

^{*}Recovery Animals.

Four animals per sex in each dose group were necropsied during Week 14. The remainder of the animals were held for a thirteen week recovery period at which time they were necropsied.

Bone marrow smears were prepared from the rib of each animal at both necropsies. The smears were fixed in methanol, stained with a Wrights-Giemsa stain, and evaluated microscopically to determine the Myeloid:Erythroid (M:E) Ratio. The M:E Ratio was determined on a cell count of 500 cells.

Statistical analysis of the data was performed by TRL and provided to PAI for inclusion in this report.

RESULTS

DRAFT

M:E Ratio Group Summary tables are presented in Section II (generated by TRL from PAI data sheets). Individual animal M:E Ratio data are presented by dose group and sex in Section III (generated by TRL from PAI data sheets). PAI-generated individual animal data sheets are presented by dose group and sex in Section IV.

The M:E Ratios from bone marrow smears collected during week 14 in this study were within normal limits for animals in Groups 1 and 2. The M:E Ratios from male and female animals in Groups 3 and 4 were significantly decreased in a dose-related mariner as compared to controls.

The M:E Ratios from bone marrow smears collected after the thirteen week recovery period in this study were within normal limits for animals in all dose groups as compared to controls.

CONCLUSION

Under the conditions of this study, WR 238605 resulted in a treatment-related effect in the M:E Ratio of the rib bone marrow of male and female treated dogs at Week 14. The M:E Ratios from male and female animals in Groups 3 and 4 were significantly decreased in a dose-related manner as compared to controls. The M:E Ratios from bone marrow smears collected after the thirteen week recovery period in this study were within normal limits for animals in all dose groups as compared to controls.

Lynda L. Pippin, DVM August 6, 1993

DRAFT

II. M:E Ratio Group Summary Tables

SUMMARY REPORT TEST: M:E RATIO

STUDY: 097 STUDY NO: 097BM

SEX: MALE

ANALYSIS OF VARIANCE FOLLOWED BY DUNNETT'S PROCEDURE

PERIOD(s): Week 14 Week 27

Group: 1M: 0 mg base/kg/day

Group: 1M : 0 mg base/kg/day
MEAN 1.76 1.76
SD 0.054 0.062
N 4 4

Group: 2M : 0.1 mg base/kg/day
MEAN 1.84 1.76
SD 0.048 0.083
N 4 4

Group: 3M : 2.0 mg base/kg/day
MEAN 1.64* 1.75
SD 0.043 0.048
N 4

Group: 4M : 6.0 mg base/kg/day
MEAN 1.57** 1.76
SD 0.059 0.070
N 4 4

SUMMARY REPORT TEST: M:E RATIO

ANALYSIS OF VARIANCE FOLLOWED BY DUNNETT'S PROCEDURE

STUDY: 097 STUDY NO: 097BM

URAFT

PERIOD(s): Week 14 Week 27

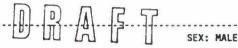
Group: 1F : 0 mg base/kg/day 1.80 MEAN 1.84 0.077 0.047 SD N

Group: 2F : 0.1 mg base/kg/day MEAN 1.80 1.82 SD 0.104 0.056 N

Group: 3F : 2.0 mg base/kg/day 1.79 1.65* MEAN 0.072 SD N

Group: 4F : 6.0 mg base/kg/day 1.57** MEAN SD 1.82 0.078

SUMMARY REPORT TEST: M:E RATIO



STUOY: 097 STUDY NO: 0978M

ANALYSIS OF VARIANCE FOLLOWED BY DUNNETT'S PROCEDURE

				Std.	DUNNETT'S		DUNNETT'S	RANGES		T.	egree	Sum of	Mean
Group	N	Total	Mean	Dev.	't'	LO -9	5%- HI	LO -99%-	HI	Source	Fdm	Squares	Square
M	4	7.05	1.76	0.054						TREATMENTS	3	0.169	0.056
М	4	7.35	1.84	0.048	2.06	1.67	1.86	1.63	1.89	ERROR	12	0.032	0.003
M	4	6.57	1.64	0.043	3.30	1.67	1.86*	1.63	1.89				
М	4	6.29	1.57	0.059	5.23	1.67	1.86*	1.63	1.89**	TOTAL	15	0.201	
F	Ratio =	21.	36 'F'	table va	lues		F.01 =	5.95	F.05	= 3.	49		
Coeff.	Var. % =	3.0	17 Dunr	nett's 'T	' table val	ues	P.01 =	3.58	P.05	= 2.	.68		
	Week	27											
M	4	7.02	1.76	0.062			*			TREATMENTS	3	0.0008	0.0003
М	4	7.05	1.76	0.083						ERROR	12	0.0542	0.0045
М	4	6.98	1.75	0.048									
M	4	7.05	1.76	0.070						TOTAL	15	0.0550	
F	Ratio =	0.0	06 'F'	table va	lues		F.01 =	5.95	F.05	= 3.	.49		
Coeff	Var. % =	3.8	25 Dunr	ett's IT	' table val	LIES	P.01 =	3.58	P.05	= 2	.68		

SUMMARY REPORT TEST: M:E RATIO



EX: FEMALE

STUDY: 097 STUDY NO: 097BM

ANALYSIS OF VARIANCE FOLLOWED BY DUNNETT'S PROCEDURE

	Week	14											
			50.000		UNNETT'S		DUNNETT'S				egree	Sum of	Mean
Group	N	Total	Mean	Dev.	't'	LO -9	5%- HI	LO -99%-	HI	Source	Fdm	Squares	Square
1F	4	7,35	1.84	0.077						TREATMENTS	3	0.194	0.065
2F	4	7.18	1.80	0.104	0.73	1.68	1.99	1.63	2.05	ERROR	12	0.082	0.007
3F	4	6.59	1.65	0.072	3.25	1.68	1.99*	1.63	2.05				
4F	4	6.26	1.57	0.074	4.66	1.68	1.99*	1.63	2.05**	TOTAL	15	0.276	
F	F Ratio =	9.4	3 'F'	table val	ues		F.01 =	5.95	F.05	= 3.	49		
Coeff.	Var. % =	4.83	5 Dunn	ett's 'T'	table val	ues	P.01 =	3.58	P.05	= 2.	68		
	Week	27											
1F	4	7.20	1.80	0.047						TREATMENTS	3	0.0020	0.0007
2F	4	7.26	1.82	0.056						ERROR	12	0.0574	0.0048
3F	4	7.17	1.79	0.088									
4F	4	7.28	1.82	0.078						TOTAL	15	0.0593	
F	F Ratio =	0.1	4 'F'	table val	ues		F.01 =	5.95	F.05	= 3.	49		
Coeff.	Var. % =	3.82	7 Dunn	ett's 'T'	table val	ues	P.01 =	3.58	P.05	= 2.	68		

III. Individual Animal M:E Ratio Data

DRAFT

INDIVIDUAL ANIMAL REPORT BY GROUP TEST: M:E RATIO

		res	T: M: E	E RATIO					
STUDY ID: 097 STUDY NO: 097BM ASSR: M:E RATIO					R	A	ß	T	SEX: MALE
	ANIMAL	ID	Week 14	Week 27					
	GROUP: 7531 7532 7512 7515 7521 7533 7520 7505 MEAN SD N		mg base/l	1.84 1.70 1.72 1.76 					
	00010	24.0			 				• • • • • • • • • • • • • • • • • • • •
	7527 7519 7529 7536 7503 7523 7517 7528	2M:0	.1 mg base 1.78 1.89 1.86 1.82	1.82 1.66 1.73 1.84					
	MEAN		1.84	1.76					
	SD		0.048	0.083					
	N		4	4					
	GROUP: 7538 7516 7522 7510 7576 7506 7502 7514 MEAN SD N	3M:2	1.69 1.63 1.59 1.66 1.64 0.043	1.72 1.81 1.75 1.70 	 				
	GROUP: 7535 7511 7530 7507 7508 7509 7518 7524 MEAN SD N	4M:6	.0 mg base 	e/kg/day 1.76 1.78 1.84 1.67 1.76 0.070 4					

INDIVIDUAL ANIMAL REPORT BY GROUP TEST: M:E RATIO

	TI	EST: M:E	RATIO			
STUDY ID: 097 STUDY NO: 097BM ABBR: M:E RATIO					3 7	SEX: FEMALE UNITS: -
	ANIMAL II	Week 14	Week 27			
	GROUP: 11 7557 7541 7566 7549 7555 7558 7573 7542 MEAN SD N	1.87 1.84 1.73 1.91 1.84 0.077	1/day 1.75 1.78 1.86 1.81 			
	GROUP 2	F:0.1 mg base/	/kg/day			
	7543 7553 7545 7552 7569 7560 7567 7550	1.70 1.92 1.84 1.72	1.89 1.82 1.76 1.79			
	MEAN	1.80	1.82			
	SD N	0.104	0.056			
	GROUP: 3 7562 7548 7571 7561 7564 7574 7556 7572 MEAN SD N	1.65 0.072	1.72 1.73 1.81 1.91 1.79 0.088			
	GROUP: 4 7539 7563 7540 7554 7568 7544 7546 7551 MEAN SD N	1.50 1.67 1.53 1.56 1.57 0.074	1.76 1.75 1.91 1.86 1.82 0.078			

IV. Individual Animal Data Sheets

DRAFT

DRAFT REPORT TRL STUDY NO. 097 (MALE DOGS)

BONE MARROW M:E RATIO DATA

Group 1

Vehicle Control: 0 mg base/kg/day

ANIMAL NO.	7505	7520	7521	7533
ABSOLUTE	319:181	320:180	314:186	323:177
RATIO	1.76:1.00	1.78:1.00	1.69:1.00	1.82:1.00



Group 2

Low-Dose: 0.1 mg base/kg/day

ANIMAL NO.	7503	7517	7523	7528
ABSOLUTE	320:180	325:175	327:173	323:177
RATIO	1.78:1.00	1.86:1.00	1.89:1.00	1.82:1.00

Group 3

Mid-Dose: 2.0 mg base/kg/day

ANIMAL NO.	7502	7506	7514	7576
ABSOLUTE	307:193	310:190	312:188	314:186
RATIO	1.59:1.00	1.63:1.00	1.66:1.00	1.69:1.00

Group 4

ANIMAL NO.	7508	7509	7518	7524
ABSOLUTE	304:196	306:194	301:199	311:189
RATIO	1.55:1.00	1.58:1.00	1.51:1.00	1.65:1.00

DRAFT REPORT TRL STUDY NO. 097 (FEMALE DOGS)

BONE MARROW M:E RATIO DATA

Group 1

Vehicle Control: 0 mg base/kg/day

ANIMAL NO.	7542	7555	7558	7573
ABSOLUTE	328:172	326:174	324:176	317:183
RATIO	1.91:1.00	1.87:1.00	1.84:1.00	1.73:1.00



Group 2

Low-Dose: 0.1 mg base/kg/day

ANIMAL NO.	7550	7560	7567	7569
ABSOLUTE	316:184	329:171	324:176	315:185
RATIO	1.72:1.00	1.92:1.00	1.84:1.00	1.70:1.00

Group 3

Mid-Dose: 2.0 mg base/kg/day

ANIMAL NO.	7556	7564	7572	7574
ABSOLUTE	309:191	316:184	314:186	305:195
RATIO	1.62:1.00	1.72:1.00	1.69:1.00	1.56:1.00

Group 4

ANIMAL NO.	7544	7546	7551	7568
ABSOLUTE	313:187	302:198	305:195	300:200
RATIO	1.67:1.00	1.53:1.00	1.56:1.00	1.50:1.00

DRAFT REPORT TRL STUDY NO. 097 -- RECOVERY GROUPS (MALE DOGS)

BONE MARROW M:E RATIO DATA

Group 1

Vehicle Control: 0 mg base/kg/day

ANIMAL NO.	7512	7515	7531	7532
ABSOLUTE	316:184	319:181	324:176	315:185
RATIO	1.72:1.00	1.76:1.00	1.84:1.00	1.70:1.00



Group 2

Low-Dose: 0.1 mg base/kg/day

ANIMAL NO.	7519	7527	7529	7536
ABSOLUTE	312:188	323:177	317:183	324:176
RATIO	1.66:1.00	1.82:1.00	1.73:1.00	1.84:1.00

Group 3

Mid-Dose: 2.0 mg base/kg/day

ANIMAL NO.	7510	7516	7522	7538
ABSOLUTE	315:185	322:178	318:182	316:184
RATIO	1.70:1.00	1.81:1.00	1.75:1.00	1.72:1.00

Group 4

ANIMAL NO.	7507	7511	7530	7535
ABSOLUTE	313:187	320:180	324:176	319:181
RATIO	1.67:1.00	1.78:1.00	1.84:1.00	1.76:1.00

DRAFT REPORT TRL STUDY NO. 097 -- RECOVERY GROUPS (FEMALE DOGS)

BONE MARROW M:E RATIO DATA

Group 1

Vehicle Control: 0 mg base/kg/day

ANIMAL NO.	7541	7549	7557	7566
ABSOLUTE	320:180	322:178	318:182	325:175
RATIO	1.78:1.00	1.81:1.00	1.75:1.00	1.86:1.00



Group 2

Low-Dose: 0.1 mg base/kg/day

ANIMAL NO.	7543	7545	7552	7553
ABSOLUTE	327:173	319:181	321:179	323:177
RATIO	1.89:1.00	1.76:1.00	1.79:1.00	1.82:1.00

Group 3

Mid-Dose: 2.0 mg base/kg/day

ANIMAL NO.	7548	7561	7562	7571
ABSOLUTE	317:183	328:172	316:184	322:178
RATIO	1.73:1.00	1.91;1.00	1.72:1.00	1.81:1.00

Group 4

ANIMAL NO.	7539	7540	7554	7563
ABSOLUTE	319:181	328:172	325:175	318:182
RATIO	1.76:1.00	1.91:1.00	1.86:1.00	1.75:1.00

V. Quality Assurance Statement

DRAFT



Pathology Associates, Inc.

15 Worman's Mill Court Suite I Frederick, MD 21701 (301) 663-1644 (301) 663-8994 FAX

DRAFT

QUALITY ASSURANCE STATEMENT

This bone marrow project has been inspected and audited by the PAI Quality Assurance Unit (QAU) as required by the Good Laboratory Practice (GLP) regulations promulgated by the U.S. Food and Drug Administration. Results of these activities indicate that the portions of the study performed by PAI conformed with GLP regulations and applicable Standard Operating Procedures. The bone marrow evaluation narrative report is an accurate reflection of the recorded data. The following table is a record of the inspections/audits performed and reported by the QAU.

Phase Inspected	to Management/ Study Pathologist
Individual Animal Data	08/03/93
Summary Data	08/03/93
Draft Bone Marrow Evaluation Report	08/03/93
	Phase Inspected Individual Animal Data

Justin J. Hawlk	August 12, 1993
Quality Assurance Specialist	Date

Bone Marrow Evaluation Report Study No. 097 Thirteen Week Oral Toxicity Study Of WR 238605 With A Thirteen Week Recovery Period in Dogs

DRAFT

APPENDIX 13

Protocol and Protocol Amendments

Contract No.: DAMD17-92-C-2001

Task Order No.: UIC-5A Study No.: 097

THIRTEEN WEEK ORAL TOXICITY STUDY OF WR 238605 WITH A THIRTEEN WEEK RECOVERY PERIOD IN DOGS

DRAFT

1.0 PURPOSE OF THE STUDY:

The purpose of this study is to determine specific target organ toxicity, dose-response relationships, and a no adverse effect level of WR 238605 in Beagle dogs following thirteen weeks of daily oral administration. In addition, the reversibility of these toxic effects over a 90-day recovery period will be assessed. This study will be conducted in accordance with the specifications of the Sponsor as described in Task Order UIC-5. The protocol for this study was approved by the UIC Animal Care Committee.

2.0 SPONSOR:

2.1 Name:

U.S. Army Medical Research and Development Command

2.2 Address:

Fort Detrick

Frederick, MD 21702-5009

2.3 Representative:

George Schieferstein, Ph.D.

3.0 TESTING FACILITY:

3.1 Name:

Toxicology Research Laboratory (TRL)

3.2 Address:

University of Illinois at Chicago (UIC)

Department of Pharmacology

P. O. Box 6998 Chicago, IL 60680

3.3 Study Director:

Barry S. Levine, D.Sc., D.A.B.T.

4.0 DATES:

4.1 <u>Study Initiation Date</u>

(see 11.0; Protocol Approval): 9/1/92

4.2 Proposed Initiation of Dosing:

12/10/92

4.3 Proposed Necropsy Dates:

3/11/12/93; 6/10,11/93

4.4 Proposed Study Completion Date

(Draft Study Report): 10/15/93

5.0 TEST ARTICLE

5.1 Name or Code No: WR 238605 Succinate

Contract No.: DAMD17-92-C-2001

Task Order No.: UIC-5A Study No.: 097

5.2 TRL Chemical No: 0720614

5.3 <u>Physical Description:</u> Pale yellow powder.

5.4 Stability and Handling of Test Article:

5.4.1 Storage Conditions to Maintain Stability:

5.4.1.1 <u>Temperature:</u> 0 - 4°C.

5.4.1.2 Humidity: Ambient conditions.

5.4.1.3 <u>Light:</u> Protect from light; amber bottle or silver foil covering.

5.4.1.4 Special Requirements: None

- 5.4.2 <u>Special Handling Procedures:</u> Standard safety precautions including gloves, eye protection, mask, and lab coats.
- 5.4.3 Log of Test Article: The amount, date, identity of person(s) removing aliquots and the purpose for which each aliquot of the test article was removed from the batch will be documented. At termination of the study, all unused test article will be returned to the Sponsor if requested.

6.0 PERSONNEL:

Study Director
Toxicologist
Pathologist
Clinical Veterinarian
Veterinarian Support
Clinical Laboratory
Ophthalmologist
Cardiologist
Tox. Lab Supervisor
Technician
Quality Assurance

Barry S. Levine, D.Sc., D.A.B.T.
E. Marianna Furedi-Machacek, D.V.M.
Michael J. Tomlinson, D.V.M., Ph.D., D.A.C.V.P.
Terry Hewett, D.V.M.
Documented in raw data
Maria Lang, A.H.T., C.V.T.
Samuel J. Vainisi D.V.M., D.A.V.C.O.
Robert Hamlin, D.V.M., Ph.D., D.A.C.V.I.M.
Soudabeh Soura, B.S.
Nancy Dinger, B.S.
Ronald C. Schoenbeck

7.0 TEST SYSTEM:

7.1 Species: Dog

7.2 Strain: Beagle

7.3 Sex(s)/Number: 32 Males & 32 Females

7.4 Age of Animals: Approximately 7 - 8 months old upon initiation of treatment.

7.5 Weight of Animals: Approximately 10 - 12 kg (males) and $\approx 8 - 10 \text{ kg (females)}$ upon initiation of treatment.

STUDY NO: 047 INITIAL: DATE: 51143

Contract No.: DAMD17-92-C-2001

Task Order No.: UIC-5A Study No.: 097

7.6 Source of Animals: Marshall Farms, North Rose, NY.



- 7.7 <u>Justification for Selection of Test System:</u> The dog is a standard and accepted non-rodent species for regulatory toxicology studies, and is specified by the Sponsor.
- 7.8 Procedure for Unique Identification of Test System: Upon arrival each animal will be given a facility unique number. This number will appear as an ear tattoo and a neck collar tag and will also appear on a cage card visible on the front of each run. The cage card will additionally contain the study number, test article identification, treatment group number and dose level. Cage cards will be color-coded as a function of treatment group. Raw data records and specimens will also be identified by the unique test animal number.
- 7.9 Housing: The animals will be housed in an AAALAC-accredited facility. Animals will be singly housed in runs in a temperature (72 ± 6°F) and humidity (approx. 50 ± 20%) controlled room with a 12 hour light/12 hour dark cycle. A few dogs may be housed two/run (within sex) during the quarantine/pretest period. The run size, 15 square feet, is adequate to house dogs at the upper weight range as described in the Guide for the Care and Use of Laboratory Animals, DHEW (NIH) No. 86.23. All runs will be cleaned and fresh bedding replaced daily. The runs will be sanitized once every two weeks.
- 7.10 Quarantine Procedure: Animals will be quarantined for approximately three weeks. During that time, the animals will be observed daily for signs of illness and all unusual observations will be reported to the Study Director, Toxicologist or Clinical Veterinarian. Body weights and physical examinations will be done upon the dogs' arrival at the animal facility. Additionally, each dog will be lightly sprayed upon arrival with PARA PYRETHRIN MIST for fleas, lice, and ticks. Within a few days of arrival, hematology (to include methemoglobin level determination) and clinical chemistry tests, and fecal examination for internal parasites will be performed. If parasites are found, the affected animal will be treated with a vermifuge approved by the Sponsor, and at least 10 days and a negative fecal examination will elapse before the animal is used on a study. All dogs will have been vaccinated against canine distemper, infectious canine hepatitis, leptospirosis, parainfluenza, parvo, oral papilloma, and rabies by the animal supplier. Animals will be examined during quarantine and approved for use by the Clinical Veterinarian prior to being placed on test. Any sickly animal will be eliminated from the test animal selection process. If a selected animal appears sickly prior to initiation of treatment, it will be replaced by a healthy animal prior to treatment under the direction of the Study Director or Toxicologist. Quarantine release will be documented on the Clinical Veterinarian Log by the veterinarian prior to study initiation.
- 7.11 Food: Purina Certified Canine Diet No. 5007 (Ralston Purina Company, St. Louis, MO), approximately 400 g, will be provided daily from arrival until termination. Exactly 400 g will be provided when food consumption is measured. The food will be removed for an

DRAFT

Contract No.: DAMD17-92-C-2001

Task Order No.: UIC-5A Study No.: 097

overnight fast (\approx 16 - 20 hours) prior to blood collection or scheduled sacrifice.

- 7.12 <u>Water:</u> Tap water from an automatic watering system in which the room distribution lines are flushed daily will be provided ad *libitum* from arrival until termination. The water is untreated with additional chlorine or HCl.
- 7.13 There are no known contaminants in the feed or water which are expected to influence the study. A copy of the feed certification will be kept with the study records. The results of bi-monthly comprehensive chemical analyses of Chicago water are documented in files maintained by Quality Assurance.

8.0 EXPERIMENTAL DESIGN:

8.1 Treatment Groups:

Treatment <u>Group</u>	Dose Level (mg base/kg/day)	Number of Males	Number of Females
1	0	4 + 4*	4 + 4*
2	0.1	4 + 4*	4 + 4*
3	2.0	4 + 4*	4 + 4*
4	6.0	4 + 4*	4 + 4*

*Recovery Animals

Dose levels were selected by the Sponsor based upon the results of an earlier 28-day gavage study in the dog (UIC/TRL Study No. 047).

Four animals/sex/group will be necropsied in Week 14. The remaining animals will be held for a thirteen week recovery period, at which time they will be necropsied.

- 8.2 Frequency and Route of Administration of the Test Article: The test article will be administered once daily by gastric intubation starting with Day O for at least 13 weeks. Control animals will receive the vehicle (aqueous 1% methylcellulose/0.4% Tween 80). The animals will be acclimated to the gavage procedure for at least three days prior to Day O. Following dosing, the test article or vehicle alone will be flushed from the catheter with approximately 20 ml distilled water. The quantity of the test article (mg/kg) will be adjusted weekly, based on each animal's most recent body weight. The animals to be sacrificed after the 13 week treatment period will be dosed up to and including the day prior to scheduled necropsy on Days 91 and 92. The recovery animals will be dosed for 91 days. Dosing volume will be 1 ml/kg, and the actual volume (ml) administered will be documented in the raw data.
- 8.3 <u>Justification of Route(s):</u> Oral treatment is the intended clinical route and is specified by the Sponsor.
- 8.4 <u>Procedure to Control Bias during the Assignment of Animals to Treatment Groups:</u> The animals will be randomized using a restricted randomization procedure, stratified by body weight. Baseline data

REVISED PAGE
STUDY NO: 047 INITIAL: 37
DATE: 11/30/42

Contract No.: DAMD17-92-C-2001 Task Order No.: UIC-5A

Task Order No.: UIC-5A Study No.: 097

including clinical pathology, ophthalmology, and ECG data will be used to select appropriate animals for randomization.

- 8.5 Test Article Vehicle: Aqueous 1% methylcellulose/0.4% Tween 80. Both chemicals will be obtained from Sigma. If another source is used, it will be identified in the raw data.
- 8.6 Test Article Dosage Form Preparation and Analyses: The test article dosing suspensions will be prepared every two weeks based on stability data from a previously conducted dog toxicity study by gastric intubation (UIC/TRL Study No. 047). WR 238605 dosage formulations were previously shown to be homogeneous in that study. The test article will be suspended in the vehicle to result in concentrations necessary to administer the dosage formulations at a volume of 1 ml/kg. The specific volume (ml) administered will be calculated on the basis of each animal's most recent body weight. Samples of all dosage formulations used in Weeks 1 & 2, 7 & 8 and 13 will be analyzed for test article concentration prior to their use. Only samples within 10% of their target concentration will be used.
- 8.7 Type and Frequency of Observations, Tests, Analyses and Measurements:
 - 8.7.1 <u>Clinical Signs:</u> All animals will be observed once daily for clinical signs of toxicity approximately 1 - 2 hours after dosing. Additionally, all animals will be observed for moribundity/mortality in the afternoon and immediately prior to dosing in the morning. During the recovery period, clinical signs will be recorded once daily in the morning.
 - 8.7.2 Clinical Observations: All animals will be subjected to a physical examination including examination of eyes and all orifices in Week -2/-1, on Day O, and weekly thereafter.
 - 8.7.3 Body Weight: Body weights of all animals will be recorded at test animal selection in the quarantine/pretest period, weekly during the treatment and recovery periods, and at scheduled necropsy.
 - 8.7.4 Food Consumption: Food consumption for all animals will be measured over an approximate 24 hour period twice during the quarantine/pretest period, and weekly during the treatment and recovery periods.
 - 8.7.5 Ophthalmologic Examinations: All dogs will be examined by indirect ophthalmoscopy prior to study initiation and during Week 13, and in Week 26 for the recovery animals.
 - Clinical Pathology: 8.7.6 Hematology and clinical chemistry parameters will be measured within one week of arrival (Week -3), and in Weeks -1, 2, 4, 8, and 13. Hematology and clinical chemistry tests will also be performed for the

Contract No.: DAMD17-92-C-2001
Task Order No.: UIC-5A

Task Order No.: UIC-5A Study No.: 097

recovery animals in Weeks 18 and Week 26. The overnight fasted animals will be unanesthetized and sufficient blood will be collected from the cephalic vein to measure the following parameters in random order. Water will be available ad libitum during all fasting periods.

Hematology

^aErythrocyte count and morphology Hematocrit Hemoglobin Leukocyte count, total and differential Platelet count Reticulocyte count Heinz bodies

Mean cell volume (MCV) Mean cell hemoglobin (MCH) Mean cell hemoglobin concentration (MCHC) Activated partial thromboplastin time Prothrombin time ^bMethemoglobin

Clinical Chemistry

Alanine aminotransferase (ALT/SGPT) Albumin Albumin/globulin ratio (calculated) Alkaline phosphatase Aspartate aminotransferase (AST/SGOT) Calcium Chloride Cholesterol Creatinine Creatine kinase (CK)

Gamma glutamyl transferase Globulin (calculated) Glucose Haptoglobin Lactate dehydrogenase Inorganic phosphorus Potassium Sodium Total bilirubin Total protein Triglycerides Urea nitrogen (BUN)

Urine specimens will be collected in Week -1, and in Weeks 2, 4, 8 and 13, and during the recovery period in Weeks 18, and 26. The following parameters will be measured.

Urinalysis

Oualitative Bilirubin Glucose Ketones Occult Blood Leukocytes

Nitrite рН Protein Urobilinogen

> REVISED PAGE STUDY NO. 097 INITIAL: 142 DATE: 4130/42

Includes nucleated RBCs.

^b To be measured with a Co-oximeter (Instrumentation Laboratory, Model No. 282). The assay will be performed within one hour of sample collection. The specimens will be kept on wet ice prior to analysis.

DRAFT

Contract No.: DAMD17-92-C-2001

Task Order No.: UIC-5A Study No.: 097

Color Specific Gravity Microscopic examination of spun sediment

- 8.7.7 Plasma Drug Levels: Sufficient blood will be collected to provide approximately 1 ml of plasma for drug level measurements at the following times: Weeks -1, 4, 8, 13, 18 and 26. The plasma samples will be sent to Dr. Emil Lin as specified by the Sponsor, and the results will not be included in the study report.
- 8.7.8 Electrocardiography: ECG tracings will be collected from all dogs in the quarantine/pretest period and in Week 13, and in Week 26 for the recovery animals. The following leads will be measured: I, a V_F and V_3 . Heart rate, and PQ and QRST intervals will be measured from Lead I.
- 8.7.9 Pathology: All animals which die on test or sacrificed if moribund will be necropsied. Four animals/sex/group will be sacrificed and necropsied in random order over a two consecutive day period (Days 91 and 92). The remaining recovery animals will be sacrificed and necropsied in random order at the onset of Week 27, after a thirteen week recovery period. This will be accomplished by sodium pentobarbital anesthesia and exsanguination. An extensive necropsy will be performed under the direction and supervision of the pathologist. Terminal body weights will be collected prior to routine sacrifice.

The necropsy procedure will be a thorough and systematic examination and dissection of the animal viscera and carcass to include the external surface, all orifices, the cranial cavity, external surface of the brain, cross section of the spinal cord, the nasal cavity and nasal turbinates, thoracic, abdominal and pelvic cavities and their viscera, and cervical tissues and organs. The following tissues and organs will be collected and fixed in 10% neutral buffered formalin (NBF).

REVISED PAGE
STUDY NO: 09 1 INITIAL: BILLINGS
DATE: 1/3/92

Contract No.: DAMD17-92-C-2001

Task Order No.: UIC-5A Study No.: 097

*Adrenal glands Aorta (thoracic) *Brain (fore-, mid-, and hind-) Colon Diaphragm Duodenum Esophagus Eyes and optic nerve *Heart Gallbladder Gross lesions Ileum Jejunum *Kidneys *Liver (with gallbladder drained) Lungs/Bronchi Lymph node (submandibular and mesenteric) Mammary gland

Muscle, skeletal *Ovaries Pancreas Pituitary Prostate Rib with costochondral junction Rib with Marrow Salivary gland (mandibular) Sciatic Nerve Skin Spinal cord (thoracic) *Spleen Stomach *Testes with epididymides *Thyroid gland with parathyroids Tongue Tonsil

*Weighed at scheduled necropsy. Paired organs will be weighed as a unit.

Trachea

Urinary bladder

Ureter

*Uterus

Histopathology requirements:

The above tissues from all dogs found dead, sacrificed either *in extremis* or at scheduled necropsy in Week 14 will be embedded in paraffin, sectioned, stained with hematoxylin and eosin, and examined microscopically. Those tissues/organs for which treatment-related lesions were observed will be examined microscopically for all recovery animals.

Bone marrow (rib) smears will be prepared for all animals at their scheduled necropsy. Myeloid:erythroid (M:E) ratios will be determined for all animals necropsied in Week 14. If treatment-related changes are seen, M:E ratios will be determined for all recovery animals.

8.7.10 Statistical Analyses: For each sex, Analysis of Variance tests will be conducted on body weight, ECG measurements, hematology, clinical chemistry and organ weight data. Organ weight analyses will include absolute weights, weights relative to body weight, and weights relative to brain weight. If a significant F ratio is obtained (p \leq 0.05), Dunnett's t test will be used for pairwise comparisons to the control group. Food consumption data will be analyzed by the Kruskal-Wallis test (p \leq 0.05). If a significant effect is seen, the Mann-Whitney U test will be used for pairwise comparisons to the control group.

TUDY NO: 097 INITIAL PA

Contract No.: DAMD17-92-C-2001

Task Order No.: UIC-5A Study No.: 097

Frequency data such as incidence of mortality, gross necropsy observations and tissue morphology observations will be compared by Fishers Exact Test or Chi-square analyses as necessary. Quantitative data will be tabulated and presented in the report. In addition to the written report, summary data tables of parameters and variability will be transmitted to the Sponsor on magnetic media (computer diskette) in "ASCII" form. The transcribed data on disk will no longer be considered GLP compliant.

9.0 RECORDS TO BE MAINTAINED:

All data generated during the conduct of the study, except those that are generated as direct computer input, shall be recorded directly, promptly, and accurately in ink in bound books with prenumbered pages or on worksheets that shall be bound during or at the conclusion of the nonclinical laboratory study. All appropriate computer and machine output shall be bound during or at the conclusion of the study. All data entries shall be dated on the day of entry and signed or initialed by the person entering the data.

Any changes in entries for whatever reason (e.g., to correct an error or transposition) shall be made so as not to obscure the original entry, shall indicate the reason for such change, and shall be dated and signed or identified at the time of data input. In computer driven collection systems, the operator responsible for direct data input shall be identified at the time of data input. Any changes in computer entries for whatever reason (e.g., to correct an error or transposition) shall be made in such a manner so as not to obscure the original entry, if possible, shall indicate the reason for such change, and shall be dated and the responsible individual shall be identified. All recorded data shall be reviewed, signed and dated by a knowledgeable person, other than the person making the entry, to assure adherence to procedures and to verify observations.

Upon completion of the study and submission of the final report, all raw data, documentation, specimens, test article reserves and other materials necessary to reconstruct the study will be stored in the TRL archives maintained by Quality Assurance.

All changes or revisions, and reasons therefore, to this protocol once it is approved shall be documented, signed by the Study Director and Sponsor, dated and maintained with the protocol.

10.0 REGULATORY REQUIREMENTS:

This study will be performed in compliance with the UIC/TRL Quality Assurance Program designed to conform with FDA Good Laboratory Practice Regulations and EPA Good Laboratory Practice Standards.

Will this study be submitted to a regulatory agency? $\underline{\text{Yes}}$ If so,to which agency(ies)? Food and Druq Administration Does the Sponsor Request that test article samples be returned? $\underline{\text{Yes}}$ Does the Sponsor request that samples of the test article/carrier mixture(s) be returned? $\underline{\text{No}}$

PRTL097

DRAFT

Contract No.: DAMD17-92-C-2001

Task Order No.: UIC-5A Study No.: 097

11.0 PROTOCOL APPROVAL:

STUDY DIRECTOR:

Barry S. Levine, D.Sc. D.A.B.T.

9/1/92 Date

QUALITY ASSURANCE:

Ronald Schoenbeck

9/1/92

SPONSOR APPROVAL:

George Schieferstein, Ph.D.

Contracting Officer's Representative (COR)

COMMENTS FROM THE COR:

U A A F T

Protocol Amendment

Study No.: 097

Thirteen Week Oral Toxicity Study of WR238605 with a Thirteen Week Title:

Recovery Period in Dogs

Page 4 Section 8.2 1.

> Change dosing volume in the last sentence of the paragraph from 0.5 ml/kg to 1 ml/kg.

Mistake in protocol. Reason:

2. Page 5 Section 8.6

Change dosing volume in the eighth line from 5 ml/kg to 1 ml/kg.

Reason: Mistake in protocol.

Approvals:

STUDY DIRECTOR:

9/24/92 9/24/92

SPONSOR APPROVAL:

George Schieferstein, Ph.D.

Contracting Officer's Representative (COR)

Protocol Amendment

Study No.: 097

Title:

Thirteen Week Oral Toxicity Study of WR238605 with a Thirteen Week

Recovery Period in Dogs

3. Page 4 Section 8.2

Add the following sentences after the second sentence:

"The animals will be acclimated to the gavage procedure for at least three days prior to Day O. Following dosing, the test article or vehicle alone will be flushed from the catheter with approximately 20 ml distilled water."

Reason:

Clarification of procedures.

4. Page 5 Section 8.7.2

Change "Week -1" to "Week -2/-1".

Reason:

Clarification of procedures.

5. Pages 5 & 6 Section 8.7.6

Remove the following blood sampling periods for clinical pathology measurements:

during the latter half of Week 1

Week 6

Week 10

Week 22

Also remove the following urine sampling period:

Week 22

Reason:

Sponsor request.

6. Page 7 Section 8.7.7

Remove the following blood sampling period for plasma drug levels:

Week 22

Reason:

Sponsor request.

Protocol Amendment

Study No.: 097

Title: Thirteen Week Oral Toxicity Study of WR238605 with a Thirteen Week

Recovery Period in Dogs

7. Page 8 Section 8.7.9

Add the following to the tissue list:

"Rib with marrow"

Reason:

Inadvertently left off protocol.

Approvals:

STUDY DIRECTOR:

Barry S. Levine, D.Sc. D.A.B.T.

Date

SPONSOR APPROVAL:

George Schieferstein, Ph.D.

Contracting Officer's Representative (COR)

Date

097 Study No.:

Title:

Thirteen Week Oral Toxicity Study of WR238605 with a Thirteen Week

Recovery Period in Dogs

8. Page 2 Section 5.3

Change "White powder" to "Pale yellow powder"

Reason:

Mistake in the protocol

Approvals:

STUDY DIRECTOR:

SPONSOR APPROVAL:

George Schieferstein, Ph.D. Contracting Officer's

Representative (COR)

DRAFT

APPENDIX 14

Study Deviations



Study Deviations*

Deviation Type	Specific Deviation	Effect on Study
Protocol	On several occasions the temperature and/or relative humidity deviated outside the specified range in the animal room(s.) The temperature and humidity deviations ranged from -0 to +2°F and -5 to +2%, respectively, outside the specified ranges.	None. These sporadic occurrences were not considered to have had an impact on the outcome of the study.
Protocol	Sponsor has requested that the PQ interval be reported as the PR interval and that the QRST interval be reported as the QT interval.	None. These are acceptable interval designations.
Protocol	The following tissues sections were not examined microscopically. Mammary gland was not present in sections from six animals (#7524, #7533, #7555, #7564, #7572 and #7573). The following tissues were missing from one animal each at trimming: thyroid-parathyroid gland (#7521); urinary bladder and prostate (#7502); skin/mammary gland (#7509); aorta (#7542); and pituitary gland (#7546).	None. No test article-related changes were detected in corresponding tissues in other animals.

*The detailed "Deviation Reports" are contained in the raw data which are archive at the University of Illinois at Chicago, Department of Pharmacology, Chicago, Illinois.

The above deviations did not affect the integrity of the study.

Barry	S.	Levine,	D.Sc.,	D.A.B.T.
Date				